4th European Congress on Intrapartum Care

ABSTRACT BOOK

- Poster Presentations -
TOPICS:

1. IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE...........3 - 22

2. INDUCTION AND AUGMENTATION OF LABOUR........................................23 - 48

3. INTRAPARTUM CARE.................................................................49 - 115

4. INTRAPARTUM CLINICAL TARGETS..................................................116 - 121

5. LABOUR IN SPECIFIC SITUATIONS....................................................123 - 142

6. MATERNAL MORBIDITIES & MORTALITY.........................................143 - 174

7. WOMEN CENTERED CARE............................................................175 - 200
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 51

TITLE: USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE IN CHILDBIRTH AND POSTPARTUM IN MASHHAD, IRAN

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CONTENT:
Increased global interest and strong beliefs in the healing effects of complementary and alternative medicine (CAM), initiated an investigation to assess the prevalence of CAM use, its indications and users, satisfaction during childbirth and postpartum among Iranian women in Mashhad, Iran.

In a prospective study, 106 women from obstetric wards at 26 health centers in Mashhad, Iran were selected through a multistage sampling method. Women were interviewed on the 10th and 40th day of postpartum regarding CAM use. Several in-depth interviews were made to develop a questionnaire and its content validity was confirmed by a panel of experts. It was later piloted to establish reliability and then used to collect data in domains of the CAM types in 4 subcategories, indications of use and users’ satisfaction. Descriptive statistics, t-test and chi-square test were used and set at 95% confidence level.

The prevalence of CAM use in childbirth and postpartum was high at 96% and the preferred methods were diet and nutrition (87%), herbs or herb-based pharmacological products (59%), mind-body interventions (49%) and manual healing and body-based practices (46). The main reasons to use CAM were body renewal in postpartum (74%), wound healing (59%), to calm down (37%), to reduce post partum bleeding (31%) and to facilitate labor and delivery (26%). Eating date fruits was the most common practice after the birth. Some 81% of mothers described CAM methods as somewhat effective and 89% stated that preferred CAM methods because of having no adverse effects or as their adverse effects are very little compared to conventional methods.

In Iran, the prevalence CAM use during childbirth and postpartum period is high. Thus, clinicians and midwives should be informed to address CAM methods at each obstetric visit. Safety and efficacy of CAM must be explored and taught in every health education program.

COI Disclosure: “None declared”
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 65

TITLE: INTRAPARTUM CARE SATISFACTION


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CONTENT:
Goals: To assess the overall satisfaction of our postpartum women, and the experience about intrapartum care. Identify predictors of dissatisfaction. Observe the experiences of women after hospital birth, expressed in their own words.

We conducted a survey descriptive study written by autofilled Maternity puerperal a general hospital during the month of August 2014. As exclusion criteria we use only the language barrier and cases of stillbirths.

A total of 180 surveys were collected.
The overall satisfaction was 4.37 / 5.
The degree of satisfaction with the physical environment was 4.33 / 5.
The degree of satisfaction on information and on participation was 4.2 / 5 4.11 / 5 respectively.
The degree of satisfaction with care was Gynecologist 4.45 / 5.
The degree of satisfaction on various aspects of midwifery care was higher than 2.90 / 3 in all of them.
Predictors of dissatisfaction we found in our study were low educational attainment, age younger than 25 or older than 35 years, absence of epidural analgesia, consumption of snuff and be unemployed. 30% of patients made a written comment, 24% of the same type was negative and 76% positive type.

1. Conducting the survey has allowed us to know weaknesses of our attention.
2. The overall satisfaction of our postpartum women is high, as well as most of the parameters studied.
3. Aspects of information and participation are those who had lower scores.
4. Identified as predictors of dissatisfaction with the low level of education, age, no administration of epidural analgesia.
5. Almost third of puerperal wanted to write an additional comment, the vast majority of positive type.

COI Disclosure: None declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 85

TITLE: STATE OF MIDWIFERY RESEARCH IN FRANCE

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4. Midwife and teacher at the Midwifery school of hospital and University of Bordeaux, Ms. Sc.

CONTENT:
Research in midwifery has for main objective to study practices in midwifery in order to improve the quality of care and to promote practices based on recent knowledge and evidence. ICM considered research as an essential component of midwifery. In France, it is necessary to question certain current practices and there is no doctorate in midwifery, and midwifery is not recognized as an academic discipline. In 2016, the body of knowledge they produce is not well documented.

We describe French midwives’ experience and perception of research and publication as well as their publications in scientific and professional journals. We conducted an online survey of midwives from June to November 2016; complemented by a bibliometric analysis of their publications in any language. Participants were 146 midwives working/residing in France or holding/studying in France for a PhD or a Masters’ degree at the time of the study; or having already published articles in any scientific or professional journal. This research was declared to the National Commission of Informatics and Liberty before its launching. Questionnaires included an introduction presenting the study, guaranteeing the respect of anonymity of respondents.

Of the 146 eligible midwives, 15 (10.3%) had a PhD degree, 54 (37.0%) reported having participated in midwifery research programs. Publication experience was reported by 73 midwives, including 26 (17.8%) who have published at least one article on midwifery in a peer reviewed journal. 97.2% of midwives with publication experience considered it useful to publish but 75.7% considered that it was a difficult process. Lack of time, not mastering scientific writing and English language were their main barriers to publication. We identified 218 articles. Pregnancy and birth were the two most studied genital life phases. Eighty-nine (28.4%) of these 314 articles were about midwifery practices or interventions.

We evidenced that although midwives in France have a limited experience of research, they publish an increasing number of scientific articles on midwifery topics. Scientific publications in midwifery in French language are limited mainly due to the lack of scientific midwifery journal in French. However, publishing in French would facilitate the access to knowledge and evidence of midwifery practitioners in French speaking countries, including those where maternal mortality ratios are very high.

COI Disclosure: None declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 124

TITLE: AN ASSESSMENT OF SATISFACTION WITH PERINATAL CARE FROM THE VIEWPOINT OF PATIENTS. A PRELIMINARY REPORT.

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CONTENT:
Childbirth is an important life event for women. It is necessary to provide pregnant women with not only professional medical care, but also appropriate emotional, social and family support. The issue of the quality of care for a woman who delivers seems to be particularly important. The aim of the work is to assess the medical care and overall satisfaction with the delivery performed from the perspective of the woman giving birth.

120 prospects were hospitalized in the period 1.05-30.09.2018 at the Department of Obstetrics of the R. Czerwiakowski Hospital in Cracow. The questionnaire consisted of 21 questions regarding the care of doctors and midwives and the course of delivery as well as the expectations of the woman giving birth.

Vaginal delivery took place in 92 (76.6%), including 84 patients (91.3%) in epidural anesthesia. Epidural anesthesia was found by 74 (88.1%) under the anesthesia as considerably improving the comfort of delivery. The family birth was in 78 (84.8%). The possibility of choosing a midwife: 87 (72.5%) and a doctor: 45 (37.5%) of patients considered an important element strengthening the sense of security. Satisfaction with activities performed by midwives was expressed by 116 (96.7%), by the doctor 114 (95%). The possibility of lactation midwife advice was helpful, 112 (93.3%). According to 98 (81.7%), participation in a childbirth school reduced the fear. 110 (91.7%) declared a decision to re-deliver in the R. Czerwiakowski Hospital.

1. Epidural anesthesia improves the comfort of the woman giving birth. 2. The majority of patients decide to have a family childbirth. 3. The ability to choose a midwife is important for most patients. 4. Participation in childbirth classes helps reduce the pregnant woman's concerns about childbirth. 5. The majority of respondents expressed their satisfaction with the delivery.

COI Disclosure: None declared.
TITLE: OPERATOR EXPERIENCE AFFECTS THE RISK OF OBSTETRIC ANAL SPHINCTER INJURY IN VACUUM EXTRACTION DELIVERIES

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CONTENT:
Vacuum extraction (VE) is a major risk factor for obstetric anal sphincter injury (OASIS), a severe maternal complication to vaginal delivery and an important cause of anal incontinence in women. The aim of this study was to assess risk factors for OASIS in VE in nulliparous women, and specifically to assess the association between operator related factors and the prevalence of OASIS. A secondary aim was to assess other complications to VE depending on operator experience.

This is a historical cohort study of nulliparous women with VE with a live single fetus ≥34 weeks, at a large teaching hospital during one year (2013), using data from computerized medical records. Risk of OASIS was assessed for obstetricians (reference), gynecologists, and residents, and adjusted for maternal, fetal, procedure, and operator related covariates. Results are presented as prevalence and crude and adjusted odds ratios (OR) with 95% confidence intervals (CI). Two adjusted models are presented.

In total, 338 women with VE met the inclusion criteria. Cesarean section after failed VE was performed in 15 (4.4%) women and these were excluded from further analysis. OASIS occurred in 57 (17.6%) of the remaining 323 women. Fifteen (11.5%) OASIS occurred in VE performed by obstetricians, 10 (13.5%) by gynecologists (aOR 1.84, 0.72-4.70), and 32 (26.9%) by residents (aOR 5.13, 2.20-11.95). Maternal height ≤155 cm (aOR 4.63, 95%CI 1.35-15.9) and conversion to forceps (aOR 19.4, 95%CI 1.50-252) also increased the risk of OASIS. Operator gender, night shift work, or individual annual number of VE did not affect the risk of OASIS. Postpartum hemorrhage or fetal complications did not differ between operator categories.

The adjusted risk of OASIS was five times higher in VE performed by residents compared to consultant obstetricians. VE by consultant gynecologists did not carry an increased risk for OASIS. Experience from years of training seem to have the highest impact on reducing OASIS in VE indicating the need for increased training and supervision.

COI Disclosure: None declared
The aim of the study was to increase understanding of integrative power in decision-making in home-like childbirth from midwives’ and women’s perspectives. A multiple case methodology was chosen. Four cases were selected from interviews with midwives and women who experienced complications in home-like births. Boulding’s descriptions of three power’s structures (coercive, exchange and integrative), was used for the analysis and for a cross-case comparison, with emphasis on integrative power.

1. Maternal exhaustion: This case shows how the labouring woman was exhausted but preferred to stay in the birth centre and how midwives supported her. Having heard her wish, the two caring midwives took advice from a senior midwife. The latter analysed the situation with all parties, and refocussed the woman on what was important for her. Two hours later she gave birth to a healthy baby.

2. High blood pressure: This case shows plans can alter even after previous births without problems in the same context. Another home birth was decided after hypertension was investigated. However, during labour a new wave of hypertension caused the plans to be changed. The safety issue brought the midwife and the woman to make the decision to transfer at hospital.

3. Prolonged labour: This case shows how the midwife involved the woman in the decision when the labour progressed slowly: continuing for an hour using active positions in the birth centre or having an epidural at hospital. With this choice the midwife advocated a safe approach to labour and birth and the woman could express her preference.

4. Retained placenta: This case shows how after a homebirth, the midwife promptly saw the abnormal bleeding and quickly decided to remove the placenta manually. The midwife acted well and in compliance with the midwifery regulatory framework and the woman was able to understand what was going on.

Cross-case comparison: mechanisms for integrative power are reconsidered across the concrete cases. The study highlights the visibility of integrative power mechanisms in decision-making in home-like settings, such as creation of relationships, cooperation, loyalty, respect and legitimacy. Until now, positive power in midwifery have been poorly described in literature. Integrative power could be a promising strategy to reinforce decision-making strategies. Therefore, clinical and policy measures explicitly addressing the positive aspects of power should be developed and evaluated.

COI Disclosure: None declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 169

TITLE: IMPLEMENTING POSTPARTUM HAEMORRHAGE SIMULATION IN THE MIDWIFERY CURRICULUM

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CONTENT: Postpartum haemorrhage (PPH) is an acute complication that may occur after any delivery. It is potentially life-threatening, which requires appropriate teamwork from health professionals. We integrated simulation-based education and learning, on handling PPH, hypothesizing this would strengthen the students’ action-competence, clinical skills and confidence.

The aim of the study was to evaluate the implementation of PPH simulation, in order to contribute to the systematic knowledge sharing.

Pre- and post-simulation questionnaires were completed by 33 and 27 2nd year midwifery students, respectively. The questionnaires address learning potentials in simulation settings, the understanding of cross-professional collaboration, and PPH-skills. Twelve students’ at a time, meet in uniform at the simulation delivery suite, with a computer-driven high fidelity mannequin, who responds physiologically to their actions. After a thorough introduction, 4 students act a 15-minute atonic scenario and the rest watch the live-streaming next door. After each scenario, we do a 30-minute feedback. We conduct the scenario three times so that each student get to act in the scenario and watch two scenarios and participate in three feedback sessions.

Before the conference, we will have doubled the number of respondents, but life-threatening results show: About the issue “knowledge of cross-professional collaboration” 18 out of 33 (55%) expected to a moderate or high degree, the simulation to contribute to such knowledge, but post-simulation all 27/27 (100%) experienced the simulation had contributed to their cross-professional collaboration. On “confidence regarding future practical training”, the students expected the simulation to give them a sense of confidence. Both pre- and post-simulation, all students scored to a moderate or high degree that simulation would improve their sense of confidence. However, the scores “high degree” increased from 14/33 (42 %) to 18/27 (67%). The students expected the simulation to contribute to their collaboration skills and increase their confidence in future practice. Post- simulation data showed that the students graded the simulation even more profitable than expected. The simulation on acute PPH, the midwifery students’ confidence and action-competences life-threatening. This may potentially save women who suffer from severe PPH. We will further develop our methods and routines in the simulation of acute clinical scenarios.

COI Disclosure: None declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 196

TITLE: SIMULATION TRAINING IN OBSTETRICS: EXPERIENCE OF A NON-UNIVERSITY HOSPITAL IN SWITZERLAND

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CONTENT:
Medical simulation involves reenacting situations that a clinical team may be confronted with. It is an effective teaching tool that allows the consolidation of technical and non-technical skills. Nevertheless, the cost and the time required are obstacles to the implementation of a simulation program. Our aim is to implement a simulation program in obstetrics compatible with budget and time constraints.

In-situ obstetrical simulation workshops of 2-hours were organized one time per month in the delivery room of the Riviera-Chablais Hospital in Switzerland. These workshops were based on different obstetrical emergencies and anesthetic complications.

Overall, a total of 12 workshops were held over one year. Two scenarios were proposed, allowing the rotation by two half-teams of employees on a working day. Topics included obstetric and maternal emergencies. These workshops allowed a better knowledge of the equipment available (defibrillator, caesarean section equipment, emergency bags for bleeding and pre-eclampsia, alarms’ localization) and a better understanding of teamwork tools (based on TeamSTEPPS). Participants’ feedback was positive.

Medical simulation can be done in-situ with few resources and have a positive impact on the technical and non-technical skills of practitioners.

COI Disclosure: None declared.
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 210

TITLE: EVALUATION OF A MULTIDISCIPLINARY TRAINING PACKAGE WITH THE COLLABORATION OF THE MIDWIFERY UNIT NETWORK EUROPEAN PARTNERS: CZECH REPUBLIC, BULGARIA AND ITALY


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CONTENT: Around 4.7 million European women give birth each year. Despite strong evidence for midwifery-led care and midwifery units, most EU countries still offer women very limited choice regarding place of birth and lead practitioner, with referral to an obstetric unit being the mainstream option. The Midwifery Unit Network (MUNet) has been promoting the implementation of midwifery units in Europe and has been offering multidisciplinary workshops as part of a strategy to develop midwifery capacity.

City University of London conducted evaluation of multidisciplinary workshops in Czech Republic, Bulgaria and Italy. Participants were midwives, doulas, obstetricians and neonatologists. An exploratory design was used. Methods included: observation of the training days, anonymous feedback forms and focus groups with the participants at the end of the training days. Objectives of the evaluation of this training package were: to evaluate the effectiveness of the workshop for maternity professionals in enhancing philosophy, knowledge and skills in midwifery-led care, to develop understanding of the barriers and facilitators to implement the learning into practice and to gather some understanding of midwifery units in those European countries.

The overall evaluation of the training indicated that the workshops were successful at renewing the participants’ confidence and motivation to promote physiological birth and a social model of maternity care. Content was considered essential for midwifery and well balanced. Participants valued the time spent together as a team and were keen on having hands-on activities. The strategic side of the training was seen as innovative. Cultural focus on risk and low prioritisation of physiology were identified as barriers to implementing evidence-based practice. Building a community and the network were identified as potential opportunities to support these realities. We currently have preliminary results; analysis will be completed early 2019.

This study gained insights into the effectiveness and value of the MUNet multidisciplinary workshops in Czech Republic, Bulgaria and Italy and of the barriers and facilitators to implement midwifery units in these countries. This may help to guide others who hope to implement similar training in maternity services across Europe and internationally. Cyclic, interactive training involving all maternity team members including midwives and doctors may be recommended to be most effective.

COI Disclosure: None declared
In this study the determinants of postpartum depression and psychosocial factors in the postpartum period were investigated.

The sample of this correlation descriptive research was composed of 250 first-time fathers admitted to the two different family health centers in Turkey. The data were collected from January to April 2018 with Personal Information Form, Edinburgh Postpartum Depression Scale, Trait Anxiety Scale and Multidimensional Scale of Perceived Social Support. Multiple linear regression was used to examine the predictors of postpartum depression.

The mean age of the fathers was 30.58 ± 4.80. 39.6% of the fathers have university or higher education status, 59.6% of the income level equal to expenditure level, 36.4% of them are working as workers, 75.6% of them had nuclear families. 70.4% of them participated in postpartum control, 35.2% have been informed about baby care. The multiple linear regression model has shown that low level of income, inadequate social support and high anxiety level are important determinants of postpartum depression in fathers (respectively $\beta=-.179$, $\beta=-.298$, $\beta=.207$; $p<0.05$ for all).

Findings show that low level of income, inadequate social support and high anxiety level are significant determinants of postpartum depression in fathers.

Keywords: Postpartum period, postpartum depression, anxiety, social support

COI Disclosure: None declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 246

TITLE: THE EFFECT OF USING THE HIGH-LEVEL SIMULATION MODEL IN EDUCATION ON THE MANAGEMENT OF SHOULDER DYSTOCIA OF MIDWIVES

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CONTENT:
In recent, the use of high fidelity simulation is suggested to be an innovative and appropriate tool in midwifery education. The aim of this study is to evaluate the effect of training with high-level simulation model on the management of the shoulder dystocia of midwives.

The sample of the study consisted of 16 midwives working in a hospital's maternity ward. The research consisted of three stages. In the first stage, Individual Information Form and Shoulder Dystocia Management Information Form were applied and then midwives managed shoulder dystocia. Shoulder Dystocia Management information and skills forms were prepared using RCOG and ACOG Shoulder Dystocia Management Guidelines. In the second phase of the study; midwives were given theoretical and practical training. In the third stage; the knowledge and skills of midwives about Shoulder Dystocia Management were re-evaluated.

In the analysis of the data, number, percentage distribution and Wilcoxon signed rank test were used. The mean age of the midwives was 35.20 ± 8.03 and the mean of their professional experience was 13.78 ± 9.12 years. The mean knowledge score of the midwives related to shoulder dystocia was 21.37 ± 7.48 and after the training it was 36.31 ± 1.58 . It was found that the knowledge score increased significantly after the training (p<0.05). Before the training, none of the midwives managed the shoulder dystocia appropriately to the algorithm of the guideline. The percentage of midwives who applied all steps of the algorithm after training increased to 62%. All midwives correctly applied primary and secondary shoulder dystocia management skills.

Training with high-level simulation model on the management of the shoulder dystocia has developed the midwives’ knowledge and skills. All participants indicated that high-fidelity simulation was a beneficial approach to learning.

COI Disclosure: None declared
TITLE: PREGNANCY AND DELIVERY IN PATIENTS WITH ARNOLD-CHIARI MALFORMATION: OUR EXPERIENCE

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CONTENT:
The Arnold-Chiari malformation (ACM) is a structural defect of the posterior cranial fossa, characterized by a downward displacement of cerebellar tonsil through the Foramen Magnum. Labour and delivery management in women with ACM is controversial: there are no guidelines and the literature is quite limited. There are no evidences that a CS under narcosis is indicated; vaginal delivery and epidural or spinal anaesthesia do not seem to have pejorative effects on this pathology.

We report on the management of 13 pregnant women with Arnold-Chiari malformation who were managed at Sant’Anna University of Turin from 2012 to 2018. The large majority of these patients (12/13; 92%) suffered from Chiari malformation type I; in 4 cases (4/12; 33%) ACM was associated with syringomyelia; one of the patients had syringomyelia without Chiari malformation.

During the pregnancy only 5 patients had symptoms correlated to ACM (headache, neck pain, dizziness). As to the delivery, 6 of these pregnant women underwent a CS (46%), 3 with an obstetrical indication and 3 elective CS (only one for ACM); 7 patients had a vaginal delivery between 37+4 and 40+4 weeks. Regarding the anaesthetic technique, the majority of patients (5/13; 38%) delivered without analgesia, the others (3/13; 23%) with epidural anaesthesia. As to CS, we had 3 cases with spinal anaesthesia, 2 cases under general anaesthesia and 1 with epidural anaesthesia.

None of the patients reported significant increase or recurrence of Chiari-related symptoms during delivery or postpartum. Only one of the patients had headache during labour, but she was affected by migraine. There were no maternal complications associated with modality of anaesthesia.

This is the largest single center series. It claims vaginal delivery is a valid option for these patients and spinal and epidural anaesthesia can be safely used. To achieve better outcomes, the management of these patients must be personalized: the mode of delivery and anesthetic procedures must be evaluated by a multidisciplinary team (a gynecologist, a neurologist and an anesthetist) on the basis of the severity of anatomical alteration and the presence of associated pathologies and symptoms.

COI Disclosure: None declared
Correct classification of perinatal information is essential to have an accurate audit of cesarean section rates. We designed this study to evaluate if there is a learning curve in maternities working with the Ten Groups System.

We used our local database to compare initial assignment of Robson Groups set by midwives with the correct classification following the TGCS rules. For this task, we designed a script in R software that assigned automatically the groups from an excel table containing all categories. Every assignment was labelled as matched or not matched regarding coincidence of fields. Historical tables were constructed from 2012 to 2017.

We analysed 8257 deliveries attended at the Hospital General de Catalunya from 2012 to 2017. The degree of coincidence between the midwife and the software assignment increased from 46.71% in 2012 to 88.34% in 2017. Most frequent mistakes were confusions between spontaneous and non spontaneous course of delivery (2-1:14.63%, 1-2:11.34%), parity in non induced deliveries (3-1:11.76%, 1-3: 6.74%) and previous cesarean section in multiparous women (4-5:5.9%).

Incorrect assignment of TGCS Groups may be more frequent than we imagine. Periodical review and comparison of Groups with obstetrical categories should be carried out to detect these kind of mistakes. Appropriate comprehension of TGCS concepts and Computerised assignment should help to avoid misclassification of cesarean sections.

COI Disclosure: None declared.
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 289

TITLE: CHANGING MODELS, CHANGING TRENDS. DIFFERENCES IN ROBSON GROUPS CONTRIBUTION TO CESAREAN DELIVERY RATES BEFORE AND AFTER IMPLEMENTING LABORIST PRACTICE MODEL IN OBSTETRIC UNIT

AUTHORS: L. Rodellar Merino 1; J. Acosta Díez 1; P. de Argacha Junyent 1; M. Fàbregas Canal 1; JM Xiberta Pons 1

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CONTENT:
Several studies show that laborist models in Delivery Ward are associated with lower rates of cesarean delivery than individual private practice. In our hospital, with a private practice model, the rate of cesarean delivery was 34.55% in 2017. After changing to a laborist model, we observed a descent in cesarean rates. We examined our C-sections, analyzing global rates and the contribution of different groups belonging to Ten-Group Robson Classification before and after changing model of care.

We conducted a retrospective analysis within two study periods: 1) before changes, from January 2017 to March 2018 (both included), and 2) after changes, from June 2018 to November 2018 (both included). Two months of transitional period, April and May 2018, were excluded. Intragroup cesarean rates and Global contribution to CS rate were analyzed for each of the groups before and after the changes. Fisher test was applied to evaluate differences. Significance level was set at 0.05. Statistical analysis was performed using R software (R core Team. Vienna 2018). Data were obtained from delivery ward records.

Cesarean section rate descended from 34.55% to 31.59% after implementing laborist model. However, this difference was not statistically significant (p value 0.1793), but it is encouraging and reaffirms that this new model of practice can be the way to stop the traditional trend to increase CS.

Analyzing CS rates independently for each one of the Ten Robson’s Groups, we found statistically significant differences for group 2, where we observed a descent in cesarean rate from 51.59% to 40.31%, which is a very important goal. There are also differences for group 6. There was no statistical significance for the rest of groups. When focusing on subgroup 2a, there was an almost significant decrease from 45.45% to 34.18% (p = 0.0505).

Reduction of global cesarean delivery rate is not due to equal reduction of CS among all ten groups of Robson’s classification. When working on strategies to reduce CS, it is especially important to focus actions on groups with a high contribution to global CS rate. Laborist model allows time and continuous follow-up during labor. Changing practice model has allowed changing trends, and results are encouraging to maintain this system and to keep designing strategies to improve results.

COI Disclosure: None declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 296

TITLE: THE NEW TEAMOBS APP: EASE EVALUATION OF THE MANAGEMENT OF POSTPARTUM HEMORRHAGE.

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CONTENT:
The management of major postpartum haemorrhage is a team effort. Easy and instant assessment of the team performance may improve treatment by clinicians and midwives. An APP free available in Google Play and App Store has been developed and tested in daily clinical practice.

The app is designed as a tool to help clinicians, midwives and researchers in obstetric care, to objectively assess teams’ clinical performance.

The app can be used in the following situations:
1) In simulation training – a tool for education and feedback on multidisciplinary team performance in simulated clinical scenarios.
2) In real-life clinical treatment: to facilitate team performance review and debriefing after real-life clinical events or to evaluate overall performance within departments over time.

Evaluation and debriefing is possible in any clinical situation with PPH where the staff uses the App.

The app has been tested by the staff in simulation and real-life cases. The staff found the tool easy to use and ease the group debriefing after an event. The assessment facilitated reflection of the quality of treatment and the teamwork.

The new app TeamOBS can ease the evaluation of the management of postpartum hemorrhage, allows a better understanding of team behaviour, and provides unique opportunities to improve education, clinical performance, and patient safety.

COI Disclosure: none declared
TITLE: VIDEO REVIEW AS A NEW TEACHING METHOD OF REAL-LIFE ASSISTED VAGINAL DELIVERIES BY VACUUM EXTRACTION

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CONTENT:
Vaginal assisted delivery by vacuum extraction is in general accepted as an operator dependent task, where the obstetrician’s technical skills is essential to conduct a safe vaginal delivery. The best clinical practice and the technical skills are described in established guidelines however. It is however unclear what role non-technical performance of the obstetric team play in ensuring high clinical performance.

We conducted an analysis of 60 real-life videos of vacuum extractions performed at a university hospital (5,000 deliveries per year) and a regional hospital (2,000 deliveries per year) in Denmark. The videos were assessed by four raters: The first pair was two junior physicians who independently assessed the non-technical performance by the checklist “Obstetric team performance” [ref]. The second pair was two senior obstetricians who assessed the clinical performance by the tool TeamOBS-VAC.

It was possible to complete real-life videos of vacuum extractions in the delivery ward and with informed consent from both women and all staff members. Review of videos was conducted systematically by two pair of raters with a high inter-rater agreement (ICC above 0.80).

Real-life video review offers a new method and new perspectives of research in obstetric teams performance. With this approach it is possible to identify how obstetric teams become effective and safe. The skills identified in this study can be included in future obstetric training programmes.

COI Disclosure: none declared
TOPIC: IMPROVING ORGANIZATION AND TEAMWORK IN LABOUR CARE

ID: 317

TITLE: DOES OBSTETRICS TRAINING MATCH THE EXPECTATIONS OF TRAINEES AND TRAINERS AND IMPROVE PATIENT SAFETY?

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CONTENT:
Obstetrics is a passionate and exciting field. Trainees are drawn to it due to its unique combination of physiological & pathological situations, collaboration between midwifery & medical teams, and the combination of surgery & medicine.
Outcomes are usually positive but morbidity and mortality still occur. Obstetrics has a learning curve & this may be steep in critical situations. The role of systematic training is to improve the safety and efficacy of patient care in a supportive environment.

Does Obstetrics training match the expectations of patients, trainees and trainers, and is it currently being done in a systematic, safe, graded and effective manner with adequate supervision?

Study design
Comparative analysis of training in Obstetrics in different parts of the world. This study compared and contrasted various centres in different countries worldwide, along with surveys of users and a review of literature in the field

Study of trainees and trainers in Obstetrics in various centres around the world. The survey attempts to identify the strengths and deficiencies of different methods of training and suggest ways to improve the different techniques. This, we hope will lead to robust discussion and improvement in the way things are done so that future patients and trainees are benefitted.

Trainees worldwide have recognized the role of Obstetrics in their future & are extremely keen to develop skills during their training. While some centers have an excellent & structured training, many don't, and there don't seem to be well defined standards worldwide (or even within the same country in many cases) which trainees should aim to achieve. Levels of involvement and supervision also vary among centers and countries. We hope the survey will provide some answers to help improve teaching and training and make obstetrics safer in a collaborative and supportive environment. Limitation in resources leading to a snapshot of a few centres worldwide.

While very limited in number of centres assessed this study shows the pros and cons of various training methods used in various centres, trainee expectations and feedback and insights into ways to improve Obstetric training worldwide

COI Disclosure: None declared
A Midwifery Unit (MU) is a location offering maternity care to healthy women with normal pregnancies in which midwives take primary professional responsibility for care. The last NICE revised guidance on intrapartum care recommends that those women should be advised that planning to give birth in a MU is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is not different compared to an Obstetric Unit. Our MU was opened on May 4th 2015 in Turin.

The target population of this analysis comprises of women who gave birth at the Sant’Anna birth centre between 2016-2017. The aim of this data analysis is to define the socio-demographic characteristics of the women who give birth in this MU and to compare the results with the existing literature on maternal and neonatal outcomes. The data analysed comes from multiple sources, including the register of the labour and birth records, the Birth Certificate and a specific data collection form created ad hoc since the opening of this MU and adapted from the existing data collection form belonging to the Midwifery Unit Network (UK).

During the two years of this study 258 women were admitted while in labour. Mode of delivery: 91.2% spontaneous vaginal birth, 4.5% caesarean section and 4.3% instrumental birth. All those women received 1:1 care.
Position at birth: 50% of women gave birth in all fours, 32% in a vertical position and the rest lying on the bed. The post-partum blood loss was <500 ml for 89% of births.
The perineum was intact in 58.9% of cases and only one episiotomy was carried out.
Neonatal outcomes: 95.5% of newborns were within the average weight of 2500-4000 grams, only one newborn had Apgar <7 at the 5th minute. Both mother and newborn were discharged within three days from the birth.

This data analysis confirmed previous results from the literature and showed that MU is a safe place to give birth and protective for the health of the mother and the newborn. Giving birth in a familiar and women-centred place has important repercussions on the woman’s well-being and on the overall positive experience of the birth for the woman, couple and family.

**COI Disclosure:** None declared
Simulation-based medical education (SBME) in obstetric care can reinforce evidence-based practices reducing communication-related errors and improving interdisciplinary team work skills in a realistic and safer learning environment. Despite its acknowledged importance, evidence from randomized controlled trials demonstrating improvement of maternal and perinatal outcome is still lacking. The aim of this report is referring the experience of the Maternal-Neonatal Simulation Center of Verona.

At the Center of Simulation and advanced training of Region of Veneto (Si. F.A.R.V.), located in Verona, a two-days course called “Operative obstetrics: training and simulations” takes place, since 2014. It is structured in three subsequent moments: a didactic phase on zone, exercitations and simulations. We use advanced technologies; in particular, we employ an highly-sophisticated birthing simulators. By coupling this tools with the intervention of “actors-instructors”, we set clinical scenario testing technical and non-technical skills. After taking part in scenarios, learners discuss during a debriefing phase (directed by specially-trained instructors, included an aviator) all that occurred during the simulation, the decisions made and the participant’s attitudes. Instructors emphasize risks of becoming confident with acquired technical skills, mostly in uncommon and complex clinical events. In particular, the attention is focused on the risk of excessive medicalization, in term of overdiagnosis and overtreatment, that can affect patient safety and care and compromise maternal and neonatal outcome.

Simulation-based training potentially improves skills, communication and patient safety. Courses have to transmit the risk that increased confidence of the skills acquired in clinical situations can translate into excessive medicalization. It is recommended the periodical repetition of the training course. Hospitals should therefore monitor clinical outcomes after the introduction of training to ensure it is effective.

COI Disclosure: none declared
Birth Centers or midwifery units (MU) are settings where a social model of care is offered to healthy women. MUs are associated with less intrapartum interventions, higher normal births, and maternal and professional satisfaction compared to obstetric units. European and Italian standards for MUs outlined the importance of factors like ethos, organizational elements and midwifery skills. There is a dearth of research on practising midwives' views on necessary skills for MUs.

Structured interviews were conducted, after consent, to practising midwives between November and December 2018 at the Margherita Birth Centre (MBC) of Careggi University Hospital in Florence. Participants were asked about the midwifery competencies and skills for working in MUs and the strategies for their development they considered to be essential.

19 participants were involved including midwives working at the MBC; colleagues who practised in MBC but currently allocated in other areas, coordinator;midwifery leads -expert of midwifery models in the Italian context- and practising midwives attending a master program at the University of Florence. Data were analysed through a thematic analysis.

Participants identified a total of 36 skills/competencies and 24 strategies for competence developments. Answers on competencies were categorized into 5 themes: continuous development and training, shared philosophy and vision, non-technical skills, technical skills, communication-team work and relational skills. The strategies for competences development were grouped into 4 themes including: staff management, training and meetings, styles of leadership, work atmosphere and team work. No quantitative measures (e.g.n. of waterbirths, n. of courses attended) resulted. Findings were critically compared to the recent standards regarding midwifery skills for MUs in European and Italian recommendations.

This is the first study focusing on the identification of essential midwifery skills and competencies to work in MUs and related strategies for their development from the perspective of Italian practising midwives. Our findings contribute to current debates and have the potential to inform midwifery management, practice and research, providing matters of reflections for leaders, stakeholders and policy makers.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 5

TITLE: OUTPATIENT INDUCTION OF LABOUR (IOL) WITH THE CERVICAL RIPENING BALLOON: A PILOT STUDY

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CONTENT:
IOL has been steadily increasing and this was noted to have a significant impact on the workload of the inpatient services as only a limited number of women were eligible for the outpatient service. This impacts not only on the hospital capacity to provide inpatient timely and high quality care but also on:
- Women experience and safety
- Workload
- Hospital cost
- Offering choice and ensuring the right women receive the right care at the right time, in the right place.

MATERIALS AND METHODS
We used quality improvement methodologies based on Lean QI principles and this includes the use of:
- Driver Diagram
- Baseline data review
- Survey
- Process mapping
- Value stream mapping
- PDSA approach to test changes
- Statistic Process Control charts to collect data over time and understand variation
- Prospective review of all outpatient IOL cases, with focus on benchmark details against set measures (process, outcomes, balancing)

This project was conducted as part of the Maternal and Neonatal Health Safety Collaborative Programme by NHS Improvement, shared locally, regionally, nationally and internationally.

Up to date, the pilot has shown excellent results; a significantly higher vaginal delivery rate (78%) compared to previously used medical agents for induction (72%), with good maternal and neonatal outcomes. Outpatient IOL increased to 4% of all inductions where previously it had been 0.5-1%. There was a significant reduction in women’s’ length of stay in hospital resulting in just under 50% Trust cost reduction. There was increased utilisation of the birth centre (16% of women delivered there where previously none of these women would have). This contributed to increased patient choice and increased patient satisfaction. The women surveyed reported to be highly satisfied with the new process of IOL.

This pilot has shown that this new practice is a valuable option for IOL
The main benefit of this new practice include:
- allow women to stay home longer
- improve women’s physical and psychological conditions
- increase the opportunity for women to choose their place of delivery
- give an opportunity for staff to provide care and focus on high risk women without “distractions”

The new pathway allowed hospital to save significant amount of expenditure and cost

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 22

TITLE: OXYTOCIN IN SPONTANEOUSLY LABOURING, SINGLE CEPHALIC, NULLIPAROUS WOMEN AT TERM (SSCNT)

AUTHORS: M Murphy 1, B Coughlan 2, C O’Herlihy 3, D Brennan 4, M Robson 5

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CONTENT:
There is no consensus on the appropriate oxytocin regimen used to treat dystocia due to inefficient uterine action (IUA) in spontaneously labouring, single cephalic, nulliparous women at term (SSCNT). Studying the total oxytocin dose given, together with fetal and uterine response in addition to labour outcome may help identify the optimum oxytocin regimen to treat IUA. This study describes a structured assessment of a high dose oxytocin regimen, the fetal and uterine response and labour outcome.

This was a single institution prospective cohort study of 905 SSCNT. A standard management of labour (Active Management of Labour) was applied. Diagnosis of dystocia presumed to be due to IUA (defined as cervical dilatation < 1 cm/hour over 2 hours in the 1st stage of labour and in the 2nd stage by a lack of rotation and descent over 1 hour) was treated with oxytocin. The oxytocin regimen used started at 5μ/minute with a maximum dose of 30μ/minute. Dose of oxytocin given and number of contractions palpated were recorded at 15 min intervals throughout labour. All caesarean deliveries (CD) were classified according to a standard classification for intrapartum CD. Labour was diagnosed when the cx was effaced and at least 1 cm dilated.

47.1% received oxytocin in the 1st stage and 11.7% in the 2nd stage of labour. CD rate was 6.7% and 10.0% in women that received oxytocin. In 1st stage of labour 94% was given at a dilatation ≤ 4 cm and 16% received the max regimen dose within 90 mins. The median dose of oxytocin in the 1st stage was 2550mU, (SD2899) range [75-18750] and in the 2nd stage was 740mU (SD655.9), range [75-3375]. Women classified by CD for fetal intolerance were intolerant to oxytocin at a lower dose than those classified as poor response. Women classified as over-contracting did not reach the max regimen dose but the fetus showed no signs of intolerance. There were no differences in neonatal outcomes between those who received oxytocin and those who did not.

Oxytocin is the most common treatment of dystocia due. There is no universally accepted oxytocin regimen. The effects of a given dose of oxytocin range from none, tachysystole, hyperstimulation to fetal intolerance. This is demonstrated by the variation in the dose of oxytocin given to women and to each group of women in the CD classification.

This method of audit of oxytocin dose given, uterine and fetal response together with labour outcome could be replicated in other centres to inform the debate.

COI Disclosure: The Authors declare no conflict of interest
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 24

TITLE: SYSTEMATIC REVIEW ON PROLONGED LABOR: VARIABLES AND STRATEGIES

AUTHORS: L. Navas Pérez 1; A. Vancells Prat 2; L. de Frutos Cristóbal 3

AFFILIATIONS: 1 Granada Primary Health Care, Spain, 2 Barcelona Primary Health Care, Spain, 3 University Hospital of Vic, Spain

CONTENT:
In prolonged labor, the increase of cesarean deliveries or reduction of fetal heart rate are only two of several examples of maternal and fetal morbidity. Currently, in order to reduce the duration of delivery, different interventions are used. The objective of this systematic review is to analyze the factors related to the labor duration and find out the most effective interventions to solve prolonged labor.

This study carries out a systematic review of the literature that examined current evidence on prolonged labor at hospitals in different locations. Twelve articles, which were published between the years 2008-2018, from the well-known bibliographic databases “Pubmed”, “Cochrane”, “Google Scholar” “Trypdatabase” were selected.

• Using epidural anesthesia, higher fetal head circumference, women aged 3500g and obese women risked the physiological duration of a labor.
• The total average duration of labor was significantly shorter in the women who received dextrose with normal saline intravenous fluid therapy.
• The partogram with alert curves and the use of corrective measures such as oxytocin or artificial rupture of membranes are very useful in order to prevent prolonged labor.
• The average duration of labor were significantly shorter in women who were administered 20 mg oral dose of propranolol during the induction.
• Finally, labor duration was shorter in women who received supportive care, acupressure and assigned to vertical position.

Progress dilation is highly individual. The diagnosis of prolonged labor should focus on such rates and the individual evaluation of every woman. In conclusion, there are different effective interventions when a delivery is prolonged. The most known interventions are the administration of oxytocin and the artificial rupture of membranes. However, non-pharmacological effective strategies like supportive care can be introduced to the medical staff to improve the delivery outcomes.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 61

TITLE: INDUCED VS SPONTANEOUS LABOR IN OUR CENTER


AFFILIATIONS: Obstetrics and gynecology dept., Santa Lucia Universitary Hospital, Cartagena, Spain

CONTENT:
Childbirth and assistance to it is the central element of perinatal medicine. Records parity and other variables associated perinatólogicas are indispensable as a method of quality control of the activity of a delivery room. Medical induction of labor is a technique that has increased in recent decades as conduct before breast pathology and / or fetal.
We Summarized the activity log of births and inductions during 2015

Retrospective study of spontaneous and induced deliveries in our hospital in 2015

The total number of births in 2015 was 2844 deliveries. The onset of labor was spontaneous in 62.48% of cases. Elective caesarean section rate was 4.95%. The induction rate was 32.55%. Inductions completed in the vaginal delivery 46.22%; in the delivery instrumented 20.95%; and 32.83% urgent Caesarean section. The spontaneous deliveries completed in the vaginal delivery 69.61%; in childbirth instrumented the 15.86% and 14.51% emergency Caesarean section.

Nearly three-quarters of the pregnant women in our center start labor spontaneously, of which almost 75% end in a normal delivery.
We induce almost a third of pregnant women in our center, of which half complete in a normal delivery, and of the other half, 50% are instrumented deliveries and 50% urgent cesareans.
The results obtained coincide with those described in the literature. The onset of natural childbirth has a lower rate of interventionism compared to induced labor.

COI Disclosure: None declared
Childbirth and assistance to it is the central element of perinatal medicine. Records parity and other variables associated perinatológicas are indispensable as a method of quality control of the activity of a delivery room. Medical induction of labor is a technique that has increased in recent decades as conduct before breast pathology and / or fetal.

We summarized the activity log induction in our maternity ward during 2015

Retrospective study of inductions occurred and causes in our center during 2015

The total number of births in 2015 was 2844 deliveries. The induction rate was 32.55%. The reasons were RPM induction (36.93); Preeclampsia (12.74); Prolonged pregnancy (12.31); Oligohydramnios (10.36); PEG / CIR (9.82); Other (7.99); Diabetes gesetacional (1.07); fetal registry (2.05); Bad obstetric history (1.72); high fetal weight (1.29); Twins (0.97); polydramnios (7.55). The way was through vaginal delivery completion at 45.57%; instrumental delivery (20.94%); Cesarean (33.47%)

The induction rate of our center is above average. Despite the fact that most pregnancies end in a normal delivery, the cesarean rate within the inductions is high.

We must review the indications of induction and the management of these to reduce interventionism

COI Disclosure: None declared
Title: Caesarean Section: Outcomes in Our Center


Affiliations: Obstetrics and gynecology dept., Santa Lucia University Hospital, Cartagena, Spain

Content: Childbirth and assistance to it is the central element of perinatal medicine. Records parity and other variables associated perinatal outcomes are indispensable as a method of quality control of the activity of a delivery room. Caesarean section is the most important surgery of a delivery room and their analysis one of the main indicators of quality of care.

We summarized the cesarean section, and outcomes, performed in our center in 2015.

Retrospective study of cesareans performed types and causes in our center during 2015

The total number of births in 2015 was 2844 deliveries. The overall Caesarean section rate was 24.75%, of which 4.95% were elective and 19.8% were urgent. The indications for elective caesarean section were CA (19.15); Breech (36.87); Macrosoma (11.34); PP (4.96); Pat. Fetal (4.25); Other (14.89). Emergency cesarean section indications were DPF (17.93) IF (21.66) NPP (27.88) RPBF (24.33) Others (8.17).

The rate of cesarean section in our center is above average. Within the programmed cesareas, the principal indication was by breech presentation. Within the urgent cesareans, the majority were due to no progression of labor.

We must analyze these data and try to improve the management of labor to improve our statistics

COI disclosure: None declared.
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 75

TITLE: MEDICAL INDUCTION DELIVERY: INDICATIONS AND OUTCOMES IN OUR CENTER


AFFILIATIONS: Obstetrics and gynecology dept., Santa Lucia Universitary Hospital, Cartagena, Spain

CONTENT:

OBJECTIVE: Calculate the percentage of births that are induced. Describe the main causes of induction. Study the results of route of delivery. Compare results of all births.

Retrospective study of perinatal data from our hospital in the 2nd half of 2016, with analysis onset form of delivery, indicating induction and delivery completion form

A total of 507 deliveries in respect of 1512 deliveries in that time period were induced. The main indication was PPROM, representing 41.42% of inductions. Other indications were, in order of incidence, pregnancy prolongation pathways (13.41%), the presence of oligohydramnios (12.03%), diagnosis of PEG-CIR (9.86%), hypertensive disease of pregnancy (7.49%) and the different types of diabetes (5.12%).

Completion of delivery was vaginal delivery in 44.77% of cases, with a rate of 22.28% and implementation of a caesarean section rate of 32.54%. Compared to overall rates, reflecting a decrease of eutocic 13 percentage points and increased rates of instrumentation and cesarean sections 6.54 and 7.35 percentage points respectively.

The number of inductions is relatively high, accounting for one third of all births. The causes are varied, but stresses the premature rupture of membranes and cause induction with 40%, according to the policy of active management instituted for years. Rates instrumentation and cesarean are high, and the percentage difference in the overall rate is also high

COI Disclosure: None declared
TITLE: RISK OF CESAREAN AFTER INDUCTION OF LABOR: IMPACT OF DEFINITION OF EXPECTANT MANAGEMENT COMPARATOR GROUP

AUTHORS: C. Zenzmaier 1; B. Pfeifer 2; H. Leitner 2; M. König-Bachmann 1

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CONTENT:
Induction of labor (IOL) is associated with higher cesarean section (CS) rates compared with spontaneous labor. Most observational studies that used expectant management (EM) as comparator, which better reflects clinical management, found no increased risk of CS after IOL. In the majority of studies, EM includes all births at a later gestation. However, given the increasing CS and IOL rates observed after 39 completed weeks, this definition of EM might add a bias in favor of early IOL.

Data for this retrospective cohort study were retrieved from the Austrian Perinatal Registry and included all hospitals births with gestational ages beyond 39 completed weeks in Austria from 2008-2016. Exclusion criteria were multiple gestation, breech presentation, stillbirth, planned CS, previous CS or other uterine surgery, diabetes, hypertension, bleeding and thrombotic disorders, placenta previa and fetal abnormalities. Indications excluded from the nonmedically indicated induction (NMII) group but retained in EM included PROM, placental insufficiency, premature separation of placenta, poly/oligohydramnios, fetal distress, preeclampsia, eclampsia, HELLP, antepartum bleeding, amniotic infection and proteinuria.

NMII in gestational week 39 (N=4944) was not associated with an increased risk of CS compared with EM (births at gestation ≥40; N=230132). CS rates were 17.2% (NMII) and 16.2% with an OR of 0.93 (95%CI 0.86-1.01). OR was adjusted for parity, BMI, duration of labor, birth weight, birth year and size of delivery unit. However, EM, when limited to 40 weeks of gestation (EM=40; N=148459) was associated with significantly reduced odds for CS (13.6%; OR 0.76, CI 0.70-0.82). This difference was similar in a subgroup with parity ≥1 (NMII: 6.1%; EM≥40: 5.5%; OR 0.88, CI 0.76-1.05; EM=40: 4.9%; OR 0.80, CI 0.68-0.94), whereas in nullipara NMII increased CS risks compared with both EM definitions.

Our findings demonstrate that the definition of the EM comparator group has a significant impact when analyzing the outcome of IOL in retrospective cohort studies. Considering NMII usually means to decide between prompt IOL or EM for a few days and then considering NMII again. Thus, to limit the EM group to a gestational age of one week beyond IOL could be useful for clinical decision-making, as it allows to better estimate the risks of EM to the next appointment compared with immediate NMII.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 155

TITLE: MULTICENTER RANDOMIZED CONTROLLED TRIAL COMPARING THE SAFETY AND EFFICACY OF THE DOUBLE BALLOON CATHETER AND THE PROSTAGLANDIN PESSARY IN INDUCTION OF LABOUR

AUTHORS: YHG Ng1, SZJ Tung2, TL Tan3, S Tagore4

AFFILIATIONS: 1,2,3KK Women's and Children's Hospital. Obstetrics and Gynaecology Department. Singapore

                                                                                                                                                  4KK Women's and Children's Hospital. Maternal Fetal Medicine Department. Singapore

CONTENT:
Induction of labour (IOL) is one of the most common procedures a woman may experience in a pregnancy. Trials have shown that vaginal prostaglandin and the double balloon catheter (DBC) are comparable with regard to efficacy and safety and women do prefer an outpatient IOL. These trials did not look directly at the immediate effects, or the potential adverse events that can occur in the first 12 hours of DBC or first prostaglandin insertion.

We conducted a multicentre study of 420 patients over a 2 year period to evaluate the use of DBC in IOL in Asian population looking at the adverse effects in the 12 hours after insertion while using a non-incremental balloon-filling regime. We wanted to evaluate the adverse events in the 12 hours after DBC or first prostaglandin inserted and to compare the efficacy of a DBC to that of a prostaglandin in labour induction. The patients were assigned randomly to cervical ripening with either a DBC or a prostaglandin pessary. Adverse events during the 12 hours after the DBC or first prostaglandins were recorded. Labour outcomes and birth outcomes were also recorded.

There were significantly less women with uterine hyperstimulation in the double balloon catheter group (2 vs 24, p=0.0001) compared to the prostaglandin group. There were no women with uterine hyperstimulation and fetal distress in the double balloon group while there were 5 women with uterine hyperstimulation and fetal distress in the prostaglandin group. Use of entonox and pain relief was significant differences in both groups in caesarean section, vaginal deliveries and time to delivery, although significantly less time was needed to achieve os>4cm in the double balloon catheter group (p>=0.0001)

The risk of uterine hyperstimulation, fetal distress and requirement for pain relief while the DBC is in situ is significantly lower than the use of prostaglandin in induction of labour and its use does not compromise efficacy of the induction. The DBC is a good alternative method for inducing women with conditions where uterine hyperstimulation is better avoided. It can also be considered as an option for outpatient induction in view of its low early adverse event profile.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 156

TITLE: FOLEY CATHETER IOL AT ROYAL JUBILEE MATERNITY SERVICE


AFFILIATIONS: 1) Royal Jubilee Maternity Service, Belfast, Northern Ireland

CONTENT:
Propess has been used the main method of induction of labour (IOL) in Royal Jubilee Maternity Service (RJMS) for several years. Large meta-analyses have highlighted that Propess is associated with uterine hyperstimulation and fetal heart rate abnormalities. Locally, this effect has been demonstrated in Serious Adverse Incident investigations. As IOL rates can be over 50%, this is a concerning finding. The Foley catheter is thought to achieve cervical ripening by local release of prostaglandins.

Baseline data was collected on 50 parous patients undergoing IOL using Propess. Factors considered included duration of IOL, hyperstimulation, need for terbutaline, duration of labour, mode of delivery and adverse maternal and neonatal outcomes.

50 parous patients were then offered IOL using a Foley catheter (size 18 with 75ml balloon: balloon filled with 50ml sterile water with recommended duration of use of 12hrs) and similar data was collected for comparison. All patients were then contacted by phone to assess patient satisfaction with IOL.

Women who had a past history of Caesarean were excluded.

As a result of clinical outcomes and patient satisfaction, a decision was made to offer Foley as the first line IOL agent for primigravidas.

28% hyperstimulated with Propess. No one hyperstimulated with Foley.
Following Propess, 58% required ARM, 46% had syntocinon and 4% had failed IOL. With Foley, 92% of prims and 98% of parous women required ARM, 98% of prims and 80% of parous women required syntocinon and there were no failed IOL. Mean admission - delivery interval was 35 hrs in prims, 21 hrs in the parous Foley group and 22 hrs in the Propess group.

Caesarean rates were 16% with Propess, 27% in the prim and 10% in the parous Foley group. There were 2 unexpected Neonatal unit admissions from the Propess group.

100% found Foley IOL acceptable. 73% found Propess acceptable. 66% of women would consider outpatient Foley IOL, 33% of women would consider outpatient Propess IOL.

There are benefits of Foley catheter IOL in terms of safety, patient satisfaction and cost effectiveness. As a result of this project, the Foley catheter has been adopted as the first line IOL agent for all patients with no history of Caesarean Section. Outpatient IOL will be offered in the near future and a dedicated IOL team of midwives is being set up.

COI Disclosure: none declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 157

TITLE: FOLEY CATHETER INDUCTION OF LABOUR AT ROYAL JUBILEE MATERNITY SERVICE

AUTHORS: Goodall H, Brown A, Zawislak A, Johnston K, Reilly K 1

AFFILIATIONS: 1) Royal Jubilee Maternity Service, Belfast, Northern Ireland

CONTENT:
Propess has been used the main method of induction of labour (IOL) in Royal Jubilee Maternity Service (RJMS) for several years. Large meta-analyses have highlighted that Propess is associated with uterine hyperstimulation and fetal heart rate abnormalities. Locally, this effect has been demonstrated in Serious Adverse Incident investigations. As IOL rates can be over 50%, this is a concerning finding. The Foley catheter is thought to achieve cervical ripening by local release of prostaglandins.

Baseline data was collected on 50 parous patients undergoing IOL using Propess. Factors considered included duration of IOL, hyperstimulation, need for terbutaline, duration of labour, mode of delivery and adverse maternal and neonatal outcomes.

50 parous patients were then offered IOL using a Foley catheter (size 18 with 75ml balloon: balloon filled with 50ml sterile water with recommended duration of use of 12hrs) and similar data was collected for comparison. All patients were then contacted by phone to assess patient satisfaction with IOL. Women who had a past history of Caesarean were excluded. As a result of clinical outcomes and patient satisfaction, a decision was made to offer Foley as the first line IOL agent for primigravidas.

28% hyperstimulated with Propess. No one hyperstimulated with Foley. Following Propess, 58% required ARM, 46% had syntocinon and 4% had failed IOL. With Foley, 92% of primis and 98% of parous women required ARM, 98% of primis and 80% of parous women required syntocinon and there were no failed IOL. Mean admission - delivery interval was 35 hrs in primis, 21 hrs in the parous Foley group and 22 hrs in the Propess group.

Caesarean rates were 16% with Propess, 27% in the prim and 10% in the parous Foley group. There were 2 unexpected Neonatal unit admissions from the Propess group.

100% found Foley IOL acceptable. 73% found Propess acceptable. 66% of women would consider outpatient Foley IOL, 33% of women would consider outpatient Propess IOL.

There are benefits of Foley catheter IOL in terms of safety, patient satisfaction and cost effectiveness. As a result of this project, the Foley catheter has been adopted as the first line IOL agent for all patients with no history of Caesarean Section. Outpatient IOL will be offered in the near future and a dedicated IOL team of midwives is being set up.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 161


AUTHORS: J. Klementsov 1 ; V. Roht 2

AFFILIATIONS: 1 Delivery department, West-Tallinn Central Hospital Women’s Clinic, Tallinn, Estonia; 2 Delivery department, West-Tallinn Central Hospital Women’s Clinic, Tallinn, Estonia

CONTENT:
According to the Estonian Medical Birth Register the number of induced births has increased significantly in Estonia: in 1997 the proportion of induced births was 7.5%, in 2013, 13.4% and in 2017, 16.9%.
In West-Tallinn Central Hospital Women’s Clinic the mean number of deliveries in 2013-2017 was 3377. The proportion of induced deliveries was 12.8% in 2013, 15.6% in 2014, 14.9% in 2015, 15.6% in 2016, 18.1% in 2017.
Reasons for labour induction, types of induction, duration of induction, Cesarean section rate and vacuum extraction rate of induced childbirth during 2013-2017 were analysed according to data in the digital hospital database.

The main reason for inducing labour was postterm pregnancy. The second reason was premature rupture of membranes or preterm premature rupture of membranes. The third reason in 2013 and 2014 was polyhydramnios or oligohydramnios, in 2015-2017 gestational diabetes. The most common type of induction in our clinic was Misperostol, followed by Prostenon gel. On average, induction lasted one or two days. Cesarean section rate following induction of labour was 18.6% in 2013, 13.7% in 2014, 14.8% in 2015, 14.1% in 2016 and 18.4% in 2017. Vacuum extraction rate following induction of labour was 6.1% in 2013, 6.7% in 2014, 4.1% in 2015, 8.8% in 2016 and 8.3% in 2017.

In the last five years the number of induced births in West-Tallinn Central Hospital Women’s Clinic increased by 5.1%. One of the reasons is the increased rate of gestational diabetes among patients. Vacuum extraction rate after induction of labour was higher than among non-induced deliveries, the Cesaeran section rate was the same or lower.

COI Disclosure: None declared.
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 191

TITLE: AUDIT: INDICATIONS AND OUTCOMES OF INDUCTION OF LABOUR

AUTHORS: C. Aung 1, A. Shah 2, L. Moy 3, K. Neales 4, S. Chissell 5

AFFILIATIONS: 1-5 East Kent Hospitals University Foundation Trust

CONTENT: Induction of labour (IOL) has a significant impact on the birth experience of women and places a strain on labour wards. IOL should be performed only when there is a clear medical indication and the expected benefits are known to outweigh the potential harm. An audit in East Kent Trust was carried out to address concerns regarding rate of induction, indications for IOL, rate of caesarean sections in women undergoing IOL and duration of the process to achieve birth.

A retrospective audit was conducted for all women induced in April 2017. The sample was determined by coding of IOL on the trust electronic system. Only the electronic system was used to gather data for post date IOL (T+7) and augmentation in those with confirmed spontaneous rupture of membranes (SRM) after 37 weeks of pregnancy. Both hand-held notes and electronic system were used to gather in depth information for all other IOLs, which included patients undergoing IOL for small for gestation age, gestational diabetes, pre-eclampsia, pregnancy induced hypertension, large for gestation age, reduced fetal movements, obstetric cholestasis, polyhydramnios and maternal request.

There were 586 deliveries trustwide. 23% of births were IOL with 46% of IOL being for post dates and SRM and 54% for other reasons. 63 % achieved spontaneous vaginal delivery, 22% had instrumental deliveries and 15% were emergency C-sections. Caesarean sections were four times higher in primiparous women compared to multiparous and assisted deliveries were also more common in the primiparous. IOL for reasons other than post date and SRM were looked at in further detail, showing the decision to induce was made by consultants in 66% of cases, with 27% of cases decided on by registrars and 7% with no documentation found. It also showed that the start of induction process to delivery took more than 2 days in 45% of cases.

Our IOL rates at the trust meets current national figures and delivery outcomes are also in keeping with statistics in the NICE guideline 2008. The audit demonstrates that primiparous women are more predisposed to intervention during the IOL process. It has also highlighted that although a huge percentage of multiparous women achieve vaginal birth after IOL they also require a prolonged period to achieve delivery impacting experiences of other women and their own.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 204

TITLE: AN ANALYSIS OF THE OBSTETRIC RESULTS OF PATIENTS QUALIFIED FOR THE INDUCTION OF A TRIAL VAGINAL BIRTH AFTER CESAREAN SECTION. PRELIMINARY REPORT.


AFFILIATIONS: Department of Obstetrics and Gynaecology. R. Czerwiakowski Hospital, Cracow Poland

CONTENT:
Vaginal birth after cesarean (VBAC) is associated with the risk of uterine rupture at the site of a cesarean section scar, which may be a lethal complication for the mother and the fetus. However, on the one hand, the ever-growing percentage of cesarean delivery, on the other hand, the willingness of patients to undergo nature’s ways encourage to search for a secure algorithm of qualifications and conduct allowing a safe trial of VBAC.

The prospective analysis included data from 120 patients hospitalized in the Delivery Bloc of the R. Czerwiakowski Hospital in Cracow from 1.06.2017 – 17.11.2018, which were qualified for the preinduction of delivery using a Foley catheter and subsequent oxytocin induction - VBAC from the longitudinal head position, under epidural anesthesia, in the operational readiness, at 39. weeks of pregnancy. Qualification for a VBAC took place in the 36th week of pregnancy based on the interview, examination and ultrasound examination of the fetus with measurement of the thickness of the lower part of the uterus at the site of the scar after cesarean section (over 2 mm) with the TA probe.

85(70.8%) of pregnant women qualified for VBAC had vaginal birth. The duration of preinduction with the Foley catheter was 12 hours in all patients, the median duration of the first period of delivery was 5h50’ (min:3h20’, max:14h10’), median duration II period 1h10’ (min:10’, max:2h50’). Of the 35 cesarean-delivered cesarean section, the indications for operation were: threatening fetal distress in 7(20%), lack of labor progression in the first period: 20(57.1%), lack of progression in the second period: 8(22.9%) patients. In none of the pregnant women delivered by cesarean section, previously qualified for VBAC, the scar of the lower uterus was not dissected intraoperatively. All newborns (120) were born in good general condition.

1. Ultrasound assessment of the thickness of the lower part of the uterus at the site of the cesarean section scarring performed in the 36th week of pregnancy with the TA probe allows the pregnant woman to be properly qualified for induction of delivery after the cesarean section. 2. The period of time from the cesarean delivery to the second resolution is not a decisive criterion.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 209

TITLE: EVALUATION OF THE EFFECTS OF TAKING EVENING PRIMROSE OIL (EPO) CAPSULES FROM 38TH WEEK OF PREGNANCY IN NULLIPAROUS WOMEN (LABOR/INDUCTION/OUTCOMES)

AUTHORS: A.K. Moaveni 1
T. Nasimi 2

AFFILIATIONS: 1 Obstetrics and Gynecology Dept., Medical University of Kurdistan, Sanandaj, Iran
2 Obstetrics and Gynecology Dept., Medical University of Kurdistan, Sanandaj, Iran

CONTENT:
Evening Primrose is a medical plant from North America. Evening Primrose Oil (EPO) contains Gamma-Linolenic Acid (GLA) that stimulates the production of prostaglandins in the body. It is believed to initiate cervical ripening due to EPO. The aim of this study was to evaluate the effects of taking EPO from 38th week of pregnancy in nulliparous women on the type of delivery, induction need, duration of induction, labor duration, neonatal outcomes, quality of labor and maternal complications.

In a double-blind randomized controlled trial performed in Sanandaj Besat Hospital, 440 nulliparous pregnant women in 38th week of pregnancy and with bishop score of <6 were divided randomly into two groups (220 in each). First group took EPO 1g Q12h and next group took placebo. In the other part of the study women that did not enter labor phase until 40th week of pregnancy from both groups were evaluated during the induction by oxytocin to check the effects of EPO on induction and outcomes.

Normal labor (NVD/CS) without needed of induction was occurred in 134 (60.9%) women of EPO group (15 C/S (11.19%) and 119 NVD (88.80%)) and 122 (55.45%) women of placebo group (21 C/S (17.21%) and 101 NVD (82.78%)). Frequency of C/S deliveries decreased significantly in EPO group compared with placebo group. 86 (39.09%) women from EPO and 98 (44.54%) women from placebo group needed induction (oxytocin) for delivery, that the rate of successful vaginal delivery was significantly higher in EPO. Duration of active phase, second and third stage of labor were shorter in EPO. No significant difference of neonatal factors and outcomes (such as 1st and 5th min apgar score/need for NICU admission) were found between the EPO and placebo groups.

This research showed significant positive results of taking EPO capsules from 38th week of pregnancy in nulliparous women, on the type of delivery (decrease cesarean section), length of labor, need for induction, duration of induction and success rate.

COI Disclosure: None declared
The number of medical inductions of labour (IOL) to finish the pregnancy have been increasing over the past years. Even though the World Health Organization does not recommend to exceed the 10%, Spain has an IOL rate of 19.4%.

There are multiple articles that relate the use of complementary therapies with spontaneous beginning of labour. Sant Joan de Déu de Martorell’s hospital, with a midwifery led care unit started to use complementary therapies in maternity care.

A 29 years old low risk pregnant woman commenced antenatal care at 35+4 weeks of gestation in Sant Joan de Déu de Martorell’s Hospital. She decided as place of birth the Midwifery led care unit in the same centre. Antenatal appointments were performed at 38 and 40 weeks of pregnancy with normal findings.

At 41 weeks, as per protocol, a routine visit with electronic fetal monitoring and ultrasound were carried out: normal trace with no uterine activity, anterior placenta, normal amniotic fluid volume, 3 vessels cord, normal dopplers, estimated fetal weight 4100g. On physical examination: normal vital signs, left occiput anterior presentation and positive fetal movements. Membranes sweep and IOL were offered and declined.

A complementary therapies session to stimulate spontaneous labour was suggested and she consented. A combination of therapies was applied in 1 hour session: reflex-zone therapy, acupressure and aromatherapy. The aim was to facilitate relaxation, ease anxiety and induce labour. The same session was performed at 41+2 weeks of pregnancy by the same professionals; 8 hours after the visit she was admitted in active labour in the birth centre, having a natural birth with no complications 4 hours later.

At the postnatal visit the woman reported a high level of satisfaction with the sessions. According to her, she and her partner felt more involved in their care, improving their relationship with the health care team.

Although scientific research in complementary therapies is limited and further investigation is needed, this case shows good results without safety complications.

Sant Joan de Déu de Martorell’s hospital, with 644 births in 2017 and with an IOL rate that exceeds the recommended by the WHO, could offer to women with low risk pregnancies complementary therapies to reduce the need for medical IOL and the cost associated with it.

COI Disclosure: None declared
The group of women that seem to show most variation in caesarean section rates are nulliparous women at term, in single cephalic presentation. A recent randomized controlled trial has shown that induction of labour at 39 weeks has lower risk of caesarean section compared to expectant management.

We conducted a retrospective cohort study of all term (37 to 42 weeks gestation) nulliparous, singleton, cephalic presentation pregnancies delivered at our institution in 2017. Induction of labour was compared to expectant management at each gestational age with the primary outcome of caesarean delivery, to demonstrate the difference between these two types of comparison. In our unit, labour is managed using the active management of labour protocol.

In 2017, 3197 nulliparous women at term either went into spontaneous labour (53.6%, n=1716), had their labour induced (41.8%, n=1337) or underwent a pre-labour caesarean section (4.5%, n=144) for various maternal or fetal reasons. When comparing the caesarean section rates at each gestational week, these were found to be higher in the induction of labour group vs. the expectant management group (EMG index) from 37 to 40 completed weeks. Only at 41 weeks gestation we noticed an increase in the caesarean section rates in the EMG compared to the induction of labour group (33.6% vs. 28.8%).

Our findings are based on the population at one maternity unit in Ireland using the active management of labour protocol and may not be generalizable. However, in the absence of any maternal or fetal indication, it seems reasonable to wait for spontaneous onset of labour until 41 weeks gestation. We advise other hospitals to calculate their own EMG index.

COI Disclosure: None declared
TITLE: CHECKLIST FOR THE APPROPRIATE USE OF OXYTOCIN IN THE MANAGEMENT OF LABOR. MATERNAL AND FETAL OUTCOME AFTER ONE YEAR OF USE IN THE DELIVERY ROOM

AUTHORS: F. Girlando 1, G. Dimino 2; C. Germano 1; P. Re 1; G. Parpinel 1; S. Paracchini 1; B. Masturzo 1; T. Todros 1

AFFILIATIONS: 1 Gynecology & Obstetrics Dept, Sant’Anna Hospital, Department of Surgical Science; City of Health and Science, University of Turin, Turin, Italy; 2 Faculty of Medicine and Surgery, University of Turin, Turin, Italy

CONTENT: Following a study showing that, despite the presence of a protocol in Sant’Anna Hospital, oxytocin was administered improperly in 81% of cases, this study had the goal to reduce the improper use in the acceleration of labor with checklists to regulate the oxytocin use in the first and second stage of labor and during the infusion. After a year, data were evaluated to verify if a correct use had reduced operative deliveries, cesarean sections and incidence of maternal and neonatal complications.

A retrospective observational study was performed on 599 women in Sant’Anna Hospital of Turin, a 7,000-births per year structure. Of these 599 women, 188 were selected according to the inclusion criteria: ≥ 37 weeks, single pregnancy, cephalic presentation, spontaneous labor. Of the 188 women, 30 received oxytocin for acceleration of labor following the checklist indications. This sample was compared to a similar one collected in the same department before the adoption of the checklist. The sample consisted of 633 women, of whom 198 adhered to the inclusion criteria. Of these 198 women, 84 had received oxytocin for labor acceleration. The use was regulated by the hospital protocol, with the result that in 68 women out of 84 it was improper.

In our study only 15.9% of the women received oxytocin, against 42.3% in the pre-checklist period. Comparing the samples of women in the two groups, there were no statistically significant differences (P > 0.05) in the type of childbirth and in the incidence of maternal and neonatal complications. On the other hand, by comparing the two groups, in the post-checklist period the spontaneous deliveries were 158 (84%), operative deliveries 9 (5%) and cesarean sections were 21 (11%) in 188 patients versus 146 spontaneous deliveries (74%), 16 operative deliveries (8%), and 36 cesarean sections (18%) in 198 patients. These differences were found to be statistically significant with P < 0.05.

The use of a checklist allowed to reduce the administration of oxytocin in the acceleration of labor. This also caused an increase of the percentage of vaginal births and a reduction of operative deliveries and cesarean sections. Some of the results weren’t statistically significant due to the small number of women analyzed. The future goal will be the widening of the number of women included in the study.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 248

TITLE: INDUCTION OR EXPECTANT MANAGEMENT IN SINGLE CEPHALIC NULLIPAROUS WOMEN AT TERM? WE NEED AN INDEX!

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AFFILIATIONS: Obstetrics-Gynaecology, National Maternity Hospital, Dublin, Ireland

CONTENT:
The group of women that seem to show most variation in caesarean section rates are nulliparous women at term, in single cephalic presentation. A recent randomized controlled trial has shown that induction of labour at 39 weeks has lower risk of caesarean section compared to expectant management.

We conducted a retrospective cohort study of all term (37 to 42 weeks gestation) nulliparous, singleton, cephalic presentation pregnancies delivered at our institution in 2017. Induction of labour was compared to expectant management, at each gestational age with the primary outcome of caesarean delivery, to demonstrate the difference between these two types of comparison. In our unit, labour is managed using the active management of labour protocol.

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Our findings are based on the population at one maternity unit in Ireland using the active management of labour protocol and may not be generalizable. However, in the absence of any maternal or fetal indication, it seems reasonable to wait for spontaneous onset of labour until 41 weeks gestation. We advise other hospital to calculate their own EMG index.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 251

TITLE: CLASSIFICATION OF WOMEN SUBMITTED TO INDUCTION OF LABOR: WHAT ARE WE MISSING?

AUTHORS: L. Angeli 1; P. Ricciardi 1; E. Di Pasquo 1; S. Fieni 1; T. Ghi 1, J. Nizard 2; M. Dommergues 2; T. Frusca 1

AFFILIATIONS: 1 Gynecology and Obstetrics Dept., University Hospital of Parma, Parma, Italy
2 Gynecology and Obstetrics Dept., University Hospital of Paris Pitie-Salpetriere, Paris, France

CONTENT:
In 2015 Nippita et al proposed a ten group classification for women undergoing induction of labor (IOL) based on gestational age, parity, obstetric history, foetal presentation and number of foetuses. We suggest to consider two additional factors that strongly affect the mode of delivery in patients submitted to IOL: the status of the membranes and obesity.

All women submitted to IOL from 01/01/18 to 31/08/18 at the University Hospital of Parma and at Pitie-Salpetriere Maternity in Paris were retrospectively classified according to Nippita classification. N1 nulliparous at 37-38 weeks, N2 nulliparous at 39-40 weeks, N3 nulliparous >41 weeks, N4 multiparous at 37-38 weeks, N5 multiparous at 39-40 weeks, N6 multiparous >41 weeks, N7 preterm pregnancies, N8 previous caesarean section, N9 non-cephalic foetus, N10 multiple gestation. We divided each group into the subgroup A, for intact membranes and B for ruptured membranes; and in subgroup 1 for women with a BMI 30. Data on mode of delivery were collected.

954 pregnant women were included. The CS rate decrease with parity, and increased in post-term pregnancies and cases with previous CS. Within each Nippita group ruptured membranes was associated with a lower caesarean section rate (CS). This reached statistical significance among primiparous women <41w, preterm pregnancies and previous CS. (N2A 27% N2B 15% p=0.009; N7A 45% N7B 7% p=0.012, N8A 50% N8B 33% p=0.014). Obesity was associated with a higher rate of CS in each Nippita group, with a statistical significance in nulliparous 41 wks. (N1A 4.6% vs N1B 92% p=0.001; N2A 13% N2B 70% p=0.0001; N6A 4% N6B 60% p=0.001).

Rupture of membranes and obesity might contribute to predict the outcomes of IOL in combination with Nippita classification.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 258

TITLE: THE USE OF MISOPROSTOL IN THE INDUCTION OF LABOUR: EXPERIENCE OF A LARGE ITALIAN CENTRE

AUTHORS: F. Fassio 1; E. Pilloni 1; C. Monzeglio 1; R. Attini 1; V. Frisina 1; M. Sutera 1; F. Girlando 1; V. Fiore 1; M. Biasio 1; G. Gregori 1; G. Menato 1; T. Todros 1

AFFILIATIONS: 1 Gynecology and Obstetrics, Sant’Anna Hospital, Department of Surgical Sciences, City of Health and Science, University of Turin, Turin, Italy

CONTENT:
Labour induction is an increasing intervention in many pregnancies due to the constant rise of maternal pathology. Misoprostol is a synthetic PGE1 analog that has been approved for the management of gastric ulcers. It is also an effective agent for labor delivery induction. In Italy this drug was used only off label for this goal before 2018. We reported our experience in Sant’Anna Hospital, a centre with a mean of about 7000 maternal deliveries every year (17% from induced labour).

We started to use oral misoprostol (Cytotec) for labour induction from January 2018 in patients with single pregnancy from 37 weeks of gestational age, bishop score < 7, absence of previous hysterotomy, normal growth of the fetus and parity < 4. All women with these inclusion criteria have been induced with Cytotec 50 mcg orally, repeated every 5 hours, as long as contractions were absent or non-painful, for no more than 4 doses. Maternal and fetal outcomes of a total of 352 women induced with misoprostol was reported.

Patients induced with misoprostol had a 14% of cesarean section rate (20% in primiparous and 4% in pluriparous women) and 10% operative deliveries with VEM (14% in primiparous e 5% in pluriparous women). There were 8 cases (2%) of tachysystole, resolved with atosiban bolus. Also the time between the induction and the birth was short (with a mean of 19 hours, 21 hours in primiparous and 16 in pluriparous women). There were 66 cases of postpartum hemorrhages (19%). Furthermore, the patient's compliance was excellent compared to vaginal use.

Before the beginning of misoprostol use, labour induction was performed using dinoprostone and cesarean section rate in the same Centre during 2017 was 23%.

The use of oral misoprostol in induction of labour can reduce cesarean section rate, with low induction-birth time, costs and hospitalization days.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 283

TITLE: DOES INDUCTION OF LABOUR INCREASE THE LIKELIHOOD OF INTRAPARTUM FETAL HYPOXIA AND WORSEN PERINATAL OUTCOMES?

AUTHORS: A. Commare 1, 2; A. Dall'Asta 2; A. Archer 1; I. Cornet 1; T. Frusca 2; E. Chandraharan 1

AFFILIATIONS: 1 St George’s University Hospitals NHS Foundation Trust, London, UK
2 Obstetrics and Gynaecology Unit, University of Parma, Parma, Italy

CONTENT:
Prostaglandins increase myometrial excitability and the synthesis of gap junctions and oxytocin receptors. However, if excessive uterine contractions lead to hyperstimulation, fetal oxygenation may be reduced because of a decrease in placental blood flow. Then, gradually evolving, subacute or acute hypoxic patterns may develop on the cardiotocograph. Our aim was to evaluate the association of the different types of hypoxia with prostaglandin-induced labour and related perinatal outcomes.

We analysed continuous cardiotocograph (CTG) traces during the last 60 minutes immediately prior to birth in spontaneous and induced labour in women with a singleton term pregnancy between 2012 and 2013 in a Tertiary Teaching Hospital in London. Labour was mostly induced with vaginal prostaglandins and the indications included prolonged rupture of membranes, post-term pregnancy and high risk obstetric and medical conditions such as pre-eclampsia, diabetes mellitus and fetal growth restriction. CTG interpretation was based on fetal pathophysiology and specific features of gradually evolving, subacute or acute hypoxia were analysed. CTG findings were correlated to demographic and clinical data and the perinatal outcomes were then analysed.

170 CTG traces were randomly selected for analysis and 152 fulfilled the selection criteria. The median age of gestation was 40 weeks + 5 days (37+4 - 42+6). 66 labours were induced (prostaglandin E2 - PGE2 in 63 cases) and post-term pregnancy was the main reason for induction (32%). Incidence of different types of hypoxia was similar in induced and spontaneous labours with predominance of gradually evolving hypoxia. There was no statistically significant difference between gradually evolving and subacute hypoxia in the induced group (61 vs 49%). Women with induced labour were more likely to receive augmentation with oxytocin (p<0.01), but perinatal outcomes were similar to spontaneous-onset labour and not influenced by indication or parity.

Induction of labour did not increase the risk of fetal hypoxia or poor perinatal outcomes compared to spontaneous onset of labour. It is likely that the shorter half-life of PGE2 (2.5-5 minutes) and a relatively short (30-60 minutes) effect on the synthesis of oxytocine receptors may have eliminated its action on the myometrium during second stage of labour. Moreover, the Ferguson’s reflex may have operated equally in both induced and spontaneous labour leading to the same hypoxic stress.

COI Disclosure: None declared.
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 291

TITLE: FETAL GROWTH RESTRICTION DIAGNOSED BY DECREASED FETAL MOVEMENTS

AUTHORS: M. Urtasun; S. García; B. Pérez; N. Abián; B. Gastón; J. Barrenetxea; C. Larrañaga

AFFILIATIONS: Obstetric and Ginecology Department, Complejo Hospitalario de Navarra, Pamplona, España

CONTENT:
Women with decreased fetal movements (DFM) should be evaluated as soon as possible, including assessment of risk factors for stillbirth and try to determine the cause of DFM, such as fetal growth restriction. A nonstress test (NST) should be performed to exclude immediate fetal compromise, an ultrasound examination should be performed to evaluate the amniotic volume fluid and fetal biometry. Doppler velocimetry is restricted to pregnancies in which fetal growth restriction has been identified.

A 31 years old woman, in her first pregnancy with no medical or gynaecological history, has consulted in the emergency department due to a DFM since 24 hours. She has no other symptoms, and has normal blood pressure. The fetus has been controlled to be a small for gestational age. The NST shows a normal baseline at 150 bpm, with normal variability without decelerations. An ultrasound is performed with an estimated fetal weight of 2228 grams (10th percentile), and it shows Doppler alteration with absence of diastole in the umbilical artery. Doppler was normal in both, middle cerebral artery and ductus venosus.

The fetus was in breech presentation, so we offered an external cephalic version, which was successful. We decided to end the pregnancy due to the doppler results. The Bishop test was 3 so we choose E2 prostaglandins with continue cardiotocography. The patient began to present regular and painful contractions every 3-5 minutes, presenting an unsatisfactory fetal pattern, with decreased variability and decelerations, so we indicated an urgent cesarean section because of the loss of fetal well-being. A 1935 grams baby girl was born, with 8/9 Apgar test at 1 and 5 minutes and the pH on the artery and vein were 7.02 and 7.03.

The cesarean was uneventful and the puerperal evolution was good. The newborn was admitted to the Neonatal Area, with a good evolution, and she was discharged at 11 days of age with a weight of 1965 grams.

When ultrasonound examination of the fetus with DFM suggests fetal growth restriction, we should closely monitoring fetal well-being, and determining the optimal time for and route of delivery. Doppler velocimetry of the umbilical artery is the primary surveillance tool for monitoring this pregnancies. When umbilical artery diastolic flow is absent or reversed, fetal prognosis is poor and if the gestational age is ≥34 weeks, we must deliver these pregnancies immediately.

COI Disclosure: None declared
In USA more than 30% of reproductive-age women are obese (body mass index [BMI] ≥30 kg/m²), almost 8% are extremely obese (class III obesity, BMI ≥40 kg/m²). Class III obesity have high rates of labor induction and induction failure. Puerperal complications are more frequent after caesarean section than vaginal delivery, but complications are higher after a failed induction. Our objective was to analyze maternal mode of delivery in women with class III obesity, body mass index [BMI] ≥40 kg/m².

Retrospective cohort study. We identified all women with BMI ≥40 kg/m² at booking at Complejo Hospitalario Navarra, from January 2015 to December 2017, with a singleton pregnancy. The primary outcome was to describe mode of delivery, proportion of induction of labor, maternal and neonatal outcomes.

147 women met study criteria. 82 had no previous vaginal deliveries, 30 had a previous caesarean section. 16 pregnancies finished in a miscarriage. 5 women had planned caesarean sections; 126 had a trial of labor, 48 after spontaneous onset, 78 were inductions of labor. Of 78 inductions, 65 had cervical ripening with PGE2 (83.3%). Premature rupture of membranes (24), hypertension (22) and diabetes (15) were the main reasons for induction of labor. 40 pregnancies ended in a cesarean section, and 91 vaginally. Among inductions, 63 delivered vaginally. 13 newborns were macrosomic (≥4000g). 45 newborns had an arterial pH 7-7.2 and only one less than 7.0. An Apgar 1 <7 was present in 11 children, 4 had an Apgar 5 <7.

Vaginal delivery is more frequent than cesarean section among women with class III obesity. Induction of labor plays an important role for achieving this goal, as well as cervical ripening with PGE2.

COI Disclosure: C Larrañaga-Azcárate has been paid lecturer for Ferring Spain
Induction of labor is a common procedure nowadays. It has an impact on the birth experience of women. That’s why we decided to review the cases of induced deliveries of our hospital. We revised the indications for induced deliveries. That process of checking our results helped us to analyse the information, and draw conclusions.

We analysed 58291 single deliveries, for the period between 2003 and 2016. Each of the deliveries happened in our hospital. The 32.7% of these deliveries were induced. We analyzed the evolution of the percentage during these years, by gestational age and the most frequent indications.

As I said previously, the 32.7% of the deliveries were induced. The induction rate maintained stable. The induced percentage is higher between 20-25, 34-36 and more than 41 weeks of gestation. The most frequent indications is the premature rupture membrane, with 43.4% of the induced deliveries. The next most frequent indications are the prolonged pregnancy, oligohidramnios and hypertensive disorders. In the prolonged pregnancies we saw an increment of the rate between 2008 and 2009. After 2009 that rate has been stable. After 40 years of maternal age the percentage of the induction deliveries, increases conspicuously.

Induction of labor is very frequent. It is important for the pregnant women. It is indispensable to follow the scientific guide indications for not to increase the percentage of induced labor without reason.

COI Disclosure: None declared
TOPIC: INDUCTION AND AUGMENTATION OF LABOUR

ID: 311

TITLE: MATERNAL-FETAL RESULTS OF INDUCED LABOUR

AUTHORS: Zabaleta I.; Gastón B.; Ruiz M.; Barrenetxea J.; Bazan M.; Pedroarena I.; Urtasun M.; Larrañaga C

AFFILIATIONS: Navarra Hospital Complex

CONTENT:
Induction of labour is a common procedure nowadays. It has an impact on the birth experience of women. It may be less efficient and is usually more painful than spontaneous labour and epidural analgesia and assisted delivery are more likely to be required. We revised the maternal-fetal results. That process of checking our results helped us to analyse the information, draw conclusions and improve our work.

We analyzed 58291 single deliveries from the period between 2003 and 2016, all of them from our hospital. The 32.7% of these deliveries were induced. We analyzed the requirement of tocurgia and cesarean section, the necessity of episiotomy as well as perineal tears compared between induced and spontaneous labour. We analyzed too fetal results, the pH from the umbilical artery blood, Apgar test and pathological Apgar results at preterm and term deliveries, the destiny of the newborn and perinatal death.

On the group of induction of labour, compared with spontaneous labour, we had 10% more cesarean sections and 8% more tocurgia. We required episiotomy at 42.1% of the induced deliveries and 33.2% of spontaneous deliveries. The percentage of perineal tears have not changed. We saw that the pH only changed if it was an elective cesarean section (the pH was better) but it doesn’t change between induced and spontaneous labour. Apgar test <7 occurred more frequent in induced labours, and more newborn went to neonate area. No changes appeared in perinatal mortality.

It is important to use correctly the indications of induction because it has impact in perinatal results. The need of cesarean section and tocurgia as well as the requirement of newborn care at neonatal area increases with induced labour.

COI Disclosure: None declared
Research has shown a lack of knowledge and skill in vaginal breech birth due to vaginal breech birth being seen as a dangerous mode of birth with many complications. However, breech birth can be nearly as safe as vaginal cephalic birth with skilled practitioners in attendance (RCOG, 2017). I would like to offer the opportunity to run a skills workshop on upright breech birth teaching the normal mechanisms and manoeuvres for resolving complications using hands-on training and videos.

The workshop could run for any amount of time the conference organisers wish. There would be an opportunity for hands-on practice for delegates wishing to attend the skills session and use of videos and a presentation will be used to teach breech birth as a complex normality rather than an abnormality. Normal mechanisms will be taught as this is the most important aspect when identifying a breech birth is progressing normally and for quickly identifying complications. Manoeuvres can be taught for resolving complications in an upright position and rationale for these would be given. Research has shown breech birth in an upright position reduces the need for manoeuvres (70% of births will occur spontaneously without the need for manoeuvres), caesarean section and shorter second stage of labour by up to 42% (Bogner et al, 215 and Louwen et al, 2016). The breech skills workshop will be interactive with the opportunity for practitioners to ask questions and discuss fears around breech birth including experiences from practice. The session will be taught by an experienced breech birth midwife who teaches breech birth for the Breech Birth Network globally. The training is evidence based and would include an evidence update discussing latest research and literature in this field.

Improving the skills of healthcare professionals (HCPs) improves options for women wishing to have a vaginal breech birth and improves outcomes for mothers and babies. Training also helps to relay any fears from healthcare practitioners which may prevent them from offering breech birth to women. Ensuring (HCPs) have up-to-date knowledge and skills in this field is an essential part of offering safe woman-centred care and are required in the incidence of undiagnosed breech in all settings.

COI Disclosure: None declared.
Trial of labor after cesarean (TOLAC) is associated with a 0.5% risk of uterine rupture. In Hospital of Southern Jutland, women with one previous cesarean section (CS) are recommended TOLAC, as part of the "Aabenraa model" introduced in 2013. The objectives of this study are to analyze mode of delivery before and after 2013, risk factors for emergency CS, maternal and neonatal outcomes after TOLAC, and compare mode of delivery after CS between hospitals in Southern Denmark.

We conducted a registry-based cohort study on deliveries from 2010 through 2015 in Hospital of Southern Jutland. Women with singleton pregnancies and one or two previous CS’s were included. Exclusion criteria were preterm deliveries, antepartum stillbirths and contraindications for TOLAC. We analyzed obstetric risk factors for intended and actual mode of delivery, along with maternal and neonatal outcomes and compared data from before and after the "Aabenraa model" was introduced. Data on uterine rupture and inter-hospital figures were acquired through ICD-10 codes.

After the introduction of the "Aabenraa model" in 2013, the TOLAC rate increased significantly from 70% to 78%, without affecting the emergency CS rate. The most important factors affecting the risk for emergency CS were breech presentation, which increased the risk (OR 7.3, p = 0.005), and previous vaginal delivery, which lowered the risk (OR 0.4, p = 0.028). TOLAC was associated with an increased risk of having at least one adverse outcome (Apgar score <7, umbilical artery pH <7.1, postpartum hemorrhage ≥1000 ml or uterine rupture) (OR 2.3, p = 0.001).

In 2016, Hospital of Southern Jutland had the highest TOLAC rate in Southern Denmark, resulting in more vaginal births after cesarean. The absolute risks of adverse outcomes after TOLAC are low. By restricting the use of CS without medical indications, some complications in future pregnancies may be avoided.

COI Disclosure: None declared
Uterine torsion is defined as torsion on the longitudinal axis of more than 45 degrees. It can occur at any age and parity. Risk factors reported in the literature are non-specific and quite common among pregnant women; they can be congenital or acquired, including previous surgery, trauma, external cephalic version, maternal posture, increased fetal movements. Nowadays, less than 300 cases are described in the literature. The maternal mortality is 9%; the foetal mortality is higher, around 12%.

A 32-year-old 3 gravida 2 para woman was admitted at 38 weeks (ws) of pregnancy for uterine contractions and caesarean’s scar pain. Prior obstetrical history included an urgent corporeal caesarean section (c/s) for fetal distress at term five years before, and an elective c/s with transversal incision three years prior to the current pregnancy. The last c/s was performed at 34 ws for scar pain with no sign of uterine rupture or dehiscence at surgery. Current pregnancy was uneventful. Placenta was described as anterior since the 20 ws scan, not praevia and without suspicion of accreta. Ultrasound and fetal monitoring were reassuring. We decided to perform an urgent c/s for suspicion of scar dehiscence. At surgery the left ovary and tube were stretched towards the right part of the uterus, with signs of ischemia. Engorged and tortuous blood vessels were also noted in the lower uterine segment. An adherence stretching from the left annexa was suspected. Transversal uterotomy was performed and a healthy girl was delivered. Further examination revealed an axial left-to-right uterine torsion of 180°, with no associated anomalies. Uterotomy was on the posterior uterine wall. Signs of ischemia and vessels turgescence had resolved at the end of the procedure after turning the uterus to its right place. Post-operative evolution was uneventful. We could not find any risk factors for uterine torsion, except the two uterine scars, one of which was corporeal.

Uterine torsion is a rare complication of pregnancy. It should be considered if persistent acute abdominal pain at any gestational age, and in particular in presence of a prior uterine surgery in women with associated risk factors. During a caesarean section, it is important to recognize the anatomical landmarks before the uterine incision. If a uterine torsion is diagnosed, derotation should be attempted. Posterior incision must be performed if derotation is unsuccessful.

COI Disclosure: None declared.
TOPIC: INTRAPARTUM CARE

ID: 16

TITLE: SINUSOIDAL PATTERN AND OUTCOMES

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AFFILIATIONS: Obstetrics and gynecology department, Warwick hospital, Warwick, United kingdom

CONTENT:
Pattern recognition is an important part of interpreting the CTG. Sinusoidal pattern is uncommonly seen. Non recognition of this pattern can lead to stillbirths and foetal compromise. It is defined as regular, smooth, undulating signal with amplitude of 5–15 bpm, frequency of 3–5 cycles per minute with absent accelerations. It is due to fetal hypoxia due to acidosis or anemia. Most fatal being severe fetomaternal haemorrhage. We are presenting 4 cases of sinusoidal pattern and outcomes.

1) Primigravida at 34+5 weeks Rh positive blood group came in with episode of decreased foetal movements. Ctg initially showed stable baseline variability of 5, no deceleration and no acceleration for 30 minutes. Hence decision was to continue ctg with close monitoring, IV cannula and urgent Kleihauer was done. After an hour Ctg showed sinusoidal pattern hence a decision for immediate delivery and paediatric team was informed of suspicion of fetomaternal haemorrhage, o negative blood was available in theatre. Baby on delivery was very pale cried at birth but developed respiratory distress. The baby had haemoglobin of 6mg/dl. The baby received blood transfusion.

2) Primigravida Rh negative pregnancy was in spontaneous labour at term Ctg showed sinusoidal pattern on intermittent occasion which was closely monitored. She had ventouse delivery due to failure to progress in second stage. Baby was severely pale on delivery normal cord PH but low haemoglobin and Kleihauer confirmed massive fetomaternal haemorrhage requiring blood transfusion.

3) Primigravida at 38 weeks in early labour, Ctg showed decreased variability for 60 minutes and then sinusoidal pattern, she had a lscs and baby was pale on birth indicating fetomaternal hemorrhage which was confirmed on Kleihauer.

4) Primigravida at 37 weeks came in with decreased foetal movements, Ctg showed sinusoidal pattern and had emergency lscs with thick meconium cord PH showed hypoxia and normal haemoglobin levels.

Training in ctg should included sinusoidal pattern recognition. It should be differentiated from pseudosinusoidal pattern. When recognized timely intervention is needed to prevent adverse outcome. Paediatric team should be available along with o negative blood in case if baby is very pale requiring immediate transfusion and clamping the cord long at delivery is important.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 19

TITLE: DELIVERY MANAGEMENT IN CASES OF AUTOSOMAL RECESSIVE POLYCYSTIC KIDNEY DISEASE: A CASE REPORT OF ABDOMINAL DYSTOICIA AND REVIEW OF LITERATURE

AUTHORS: S. Belin 1; C. Delco 2; P. Parvex 3; S. Hanquinet 4; S. Fokstuen 5; B. Martinez de Tejada 6; I. Eperon 7

AFFILIATIONS: Gynecology and Obstetrics Dept, University Hospital of Geneva, Geneva, Switzerland

CONTENT:
Autosomal recessive renal polycystic kidney disease (ARPKD) occurs in 1 in 20,000 live births. It is caused by mutations in both alleles of the PKHD1 (polycystic kidney and hepatic disease 1) gene. Prognosis is difficult to establish. We present a case of ARPKD diagnosed at 31 weeks of gestation, where delivery was complicated by abdominal dystocia. We discuss the elements that oriented our care, specifically concerning route and timing of delivery.

A 23-year-old woman G2P0, with unremarkable regular follow up of pregnancy, was referred to our tertiary center at 31 weeks of gestation because of severe oligoamnios (AFI 2) and hyperechogen, dedifferentiated and enlarged fetal kidneys. There was no other genito-urinary anomaly. A fetal MRI showed enlarged kidneys and severe pulmonary hypoplasia. We had a high suspicion of ARPKD and after discussion with our multidisciplinary team the couple opted for conservative care.

The ultrasound performed at 35 weeks of gestation showed a fetal estimated weight of 3550g and an abdominal circumference of 377mm, both above the 90th percentile. Because of the very rapid kidney growth and risk of abdominal dystocia, we proposed induction of labor after corticosteroid administration for fetal lung maturation. Vaginal delivery was complicated by abdominal dystocia resolved by continuing expulsive efforts and realizing gentle fetal traction. Immediate postpartum care was uneventful.

The male infant adapted quite well to extrauterine life, with an Apgar score of 1-7-7 and arterial and venous umbilical cord pH values of 7.23 and 7.33. Birth weight was 3300 g (P 80). Continuous peritoneal dialysis was started at day 2 of life due to anuria. Currently the infant is 8 months old and is waiting for a kidney transplantation that should be performed at the age of 2-3 years.

Molecular analysis performed after birth on DNA from the umbilical cord confirmed ARPKD.

Management of delivery in cases of suspected ARPKD needs to be planned, because of the risk of abdominal dystocia. Route and timing of delivery depend on the size of the fetal abdominal circumference and the gestational age. Kidney growth rate must also be taken into account. Furthermore, we recommend to perform routine episiotomy.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 25

TITLE: RATE OF CAESAREAN SECTIONS ACCORDING TO THE ROBSON CLASSIFICATION IN LATVIA: A POPULATION-BASED STUDY

AUTHORS: Zile I. 1, Gavare I. 1, Rezeberga D. 2,3,4

AFFILIATIONS: 1-The Centre for Disease Prevention and Control, Riga, Latvia
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CONTENT:
The Caesarean section (CS) rate has been rising through the 20th century with a substantial increase during the last 30 years. In 2015, WHO proposed the use of the Robson classification as a global standard for assessing, monitoring and comparing CS rates.

Objective. To assess the CS rate and the target groups of women who influence the CS rate the most.

Data from the Medical Birth register were used. All births in Latvia (including stillbirths) are compulsorily notified to the registry, notification is made by standardized medical record forms which are used by all maternity units across the country. CS from the year 2015 (n=4619) were compared with those from the year 2017 (n=4636). The mean maternal age, birth weight and gestational age were compared. CS were analyzed by the Robson classification, were CS ordered in 10 groups according to mother- and delivery characteristics.

The mean maternal age 29 years, gestational age at births (39.2 weeks) and birth weight (3297 grams) were stable in both years. The proportion of multiple deliveries around 1.5%.

The overall CS rate slightly increased (p<0.05) from 21.5% [2015] to 22.7% [2017]. The major contribution to the overall CS rate was made by the groups 1, 2 and 5 (in the text showed as 2017 vs. 2015). The 5th classification group is the largest part of all CS (37.1% vs. 38.3%). The CS rate in this group was 86.5% vs. 87.9%.

In the 2nd group CS were performed in 12.1% vs. 11.3%. Inside of this group the CS rate was 36.9% vs. 34.2%.

In the 1st group CS were 18.6% vs. 19.4%. The CS rate in this group slightly increased (p<0.05) 14.8% vs. 13.4%.

The Robson classification can be used as an audit tool to identify the groups that have the highest impact on overall CS rate. Primiparas and women with previous CS are the most contributors on SC rate increase in Latvia and strategy has to be developed with a focus to decrease CS rate in those groups. Further analyses on CS rate in different hospitals in Latvia is needed.

COI Disclosure: None declared.
TOPIC: INTRAPARTUM CARE

ID: 26

TITLE: CAESAREAN SECTION AT FIRST DELIVERY AND PROBABILITY OF SUBSEQUENT CHILDBEARING: A POPULATION-BASED STUDY

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CONTENT:
The use of caesarean section (CS) has increased worldwide in the last decades. The overall CS rate in Latvia is 22.7% (2017). At a population level, compared with vaginal delivery in the first pregnancy, caesarean section has been found to be associated with significantly increased rates of different complications in delivery and poor pregnancy outcomes.

Objective - To investigate the relationship between caesarean section (CS) at first delivery and probability of subsequent childbearing.

Data from the Medical Birth register were used. All births in Latvia (including stillbirths) are compulsorily notified to the registry, notification is made by standardized medical record forms which are used by all maternity units across the country. A cohort consisted of 154 153 women who had their first delivery between 2000 and until 31 December 2016. Multiple births and stillbirths were excluded. Cox’s proportional-hazards model (HR) was used. Regression model adjusted for mother age; education; maternal diseases as diabetes, pregnancy complications (hypertension, preeclampsia, eclampsia, placenta previa, placental abruption).

There were 79.0% vaginal deliveries, 7.2% planned/elective CS and 13.8% emergency CS. The mean maternal age at first delivery differed between groups (p<0.001), respectively 24.2 (±4.6) vs. 27.8 (±5.9) vs. 26.2 (±5.2). Different maternal diseases were observed 29.1% vs. 42.1% vs. 35.5% and complications during delivery were registered 37.2% vs. 49.3% vs. 52.9%.

Compared with women who had a spontaneous vaginal first delivery, women who delivered by caesarean section were less likely to have a second pregnancy (HR 0.85; 95%CI 0.83–0.86). A primary planned/elective CS decreased probability of having second childbirth by 23% (HR 0.77; 95%CI 0.75–0.79) or by 11% (HR 0.89; 95%CI 0.87–0.91) if first delivery was emergency CS.

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Women with first vaginal delivery were younger, with less maternal diseases in history and complication during pregnancy. A first delivery by caesarean section reduced probability of second childbirth. A planned/elective CS did not reduce probability of subsequent childbearing to the same extent as by emergency CS.

COI Disclosure: None declared.
TOPIC: INTRAPARTUM CARE

ID: 28

TITLE: TEMPORAL TRENDS IN EPISIOTOMY USE AMONG SPONTANEOUS AND OPERATIVE VAGINAL DELIVERIES IN CANADA AND THE ASSOCIATION WITH OBSTETRIC ANAL SPHINCTER INJURY

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CONTENT: Although there is sufficient evidence to support a policy of selective episiotomy use for spontaneous vaginal delivery (SVD), there is insufficient evidence regarding episiotomy use for operative vaginal delivery (OVD). We aimed to quantify 1) the temporal trends in episiotomy use among SVDs and OVDs in Canada, and 2) the associations between episiotomy and obstetric anal sphincter injury (OASI) among SVDs and OVDs.

We carried out a population-based, retrospective, cohort study of all singleton, term deliveries in Canada (2004-2014) using hospitalization data. The main independent variables were mode of vaginal delivery (spontaneous/forceps/vacuum) and episiotomy (yes/no). The primary outcome was OASI. OVDs and OASI were identified by diagnosis and intervention codes. Temporal trends in episiotomy use by parity, previous cesarean delivery and mode of delivery were tested using the Cochran-Armitage test. Logistic regression was used to estimate the association between episiotomy use and OASI among women with SVD and OVD after controlling for confounders such as maternal age, birth weight, maternal diabetes/hypertension and socioeconomic status.

The study included 1,442,484 deliveries. Among nulliparous women, there was a smaller absolute decline in episiotomy among SVDs (22.9% in 2004 to 14.1% in 2014; p<0.0001) than OVDs (59.3% to 49.9%; p<0.0001). Although episiotomy was less frequent in parous women without a previous cesarean, the trend in episiotomy rates were similar to those in nulliparous women. Among nulliparous women with an SVD, episiotomy was associated with higher rates of OASI (5.8% with episiotomy vs 4.6% without; AOR 1.25, 95% CI 1.21-1.29). In contrast, episiotomy was associated with lower rates of OASI among OVDs (15.3% vs 16.7%; AOR 0.90, 95% CI 0.88-0.93); this association was strongest among forceps deliveries (17.8% vs 27.2%; AOR 0.63, 95% CI 0.60-0.67).

Episiotomy use has declined in Canada in recent years among SVDs and OVDs. Given the contrasting associations between episiotomy and OASI in women following SVD and OVD, generalizing guidelines on episiotomy use to all vaginal deliveries may increase harm to women undergoing OVD. There is a pressing need to consider episiotomy use in OVD (especially with forceps) given the protective association between episiotomy use and OASI.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 29

TITLE: DIURNAL NON-STRESS TEST VARIATIONS IN THE HUMAN FETUS AT RISK


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CONTENT:
The most commonly used third-trimester test of fetal well-being is the non-stress test (NST). The negative side of using NST is its high false-positive rate. Two reasons for the high rate of false-positive NST results are diurnal variations in fetal heart rate (FHR) and fetal sleep.

To compare the results of the non-stress test (NST) performed at 9:00 PM and 9:00 AM on women with high-risk pregnancies.

The NST was performed 2 h after a meal, at 9:00 AM and 9:00 PM, in a quiet room exposed to daylight, on 80 women with high-risk singleton pregnancies. Each session lasted 20 min. If the NST was nonreactive, the entire biophysical profile was immediately performed. The women’s blood pressure was measured before, 10 min within, and at the end of the NST. Women who smoked or had uterine contractions were excluded from the study.

Diurnal non-stress test variations were manifested by a higher incidence of reactive NSTs and an increased number of fetal heart accelerations after 9:00 PM (82.5%) than at 9:00 AM (68.8%) (p<0.027, P<0.001).

Evening appointments for fetal assessments, except in emergency conditions, may eliminate the need for additional tests such as the entire biophysical profile because of the decreased incidence of nonreactive NSTs. Evening NSTs would save time and decrease maternal anxiety.

COI Disclosure: None declared
Uterine hyperstimulation is a common complication of labor induction with prostaglandins and oxytocin. It is treated with tocolytic agents such as oxytocin antagonists (atosiban), calcium channel blockers (nifedipine), prostaglandin synthesis inhibitors (indomethacin), beta-mimetic drugs (ritodrine), beta-agonists (salbutamol and terbutaline), nitric oxide (nitroglycerin), and magnesium sulfate. Uterine relaxation improves fetal oxygenation, placental blood flow, and faster fetal recovery.

We exhaustively researched the PubMed, MEDLINE, and Cochrane databases looking for treatments of “uterine hyperstimulation” “uterine tachysystole” “uterine hyperactivity” “loss of fetal well-being” and “tocolytic agents”. Currently, there are no guidelines to treat fetal heart-rate abnormalities (primarily fetal bradycardia) during labor; and no comparison among the tocolytic agents for this purpose.

Non-pharmacological measures include scalp stimulation and intrauterine resuscitation, reposition of the patient onto her left or right side, oxygen administration, IV fluids, amniotomy, discontinuation of uterotonic drugs, and tocolytic agents. Amnioinfusion is not generally recommended. There is no specific recommendation among the pharmacologic measures. Ritodrine is not available in the USA or Canada where the first drug of choice is terbutaline. In European countries, the most common choice is ritodrine, although the dose administered differs according to each hospital’s protocol. No clinical trial has been done to evaluate the efficacy of the different pharmacologic options and their adverse effects.

While all these tocolytic agents have been evaluated as treatments for preterm labor, they should also be evaluated for their efficacy and risks during labor and delivery. More studies are needed to assess the efficacy and review the risks of pharmacologic tocolytic agents when used to treat a prolonged deceleration or fetal bradycardia.

COI Disclosure: None declared.
TOPIC: INTRAPARTUM CARE

ID: 43

TITLE: INVESTIGATING ADMISSIONS TO NEONATAL CARE IN BABIES BORN IN MIDWIFERY-LED SETTINGS IN ENGLAND: EXPLORATORY SECONDARY ANALYSIS USING DATA FROM THE BIRTHPLACE STUDY

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2 National Perinatal Epidemiology Unit, University of Oxford, Oxford, United Kingdom

CONTENT: Admission of term babies to neonatal care is a key indicator of the safety of maternity care in the UK. Little is known about babies who are admitted to neonatal care following birth in midwifery-led settings, where most women are healthy with straightforward pregnancies, labour and birth. The aim of this study was to explore the incidence of, and risk factors for admission to neonatal care in term babies born to healthy women with straightforward pregnancies in midwifery-led settings.

We used data from the Birthplace cohort study, which investigated the safety of birth in different settings in England 2008-10. Our analyses were based on 36,343 healthy women with straightforward pregnancies who gave birth vaginally, at 37-42 completed weeks’ gestation, in a midwifery led setting: 12,820 in an alongside midwifery unit (AMU) and 23,523 in the ‘community’ (i.e. freestanding midwifery unit or home). We estimated the incidence of admission to neonatal care within 48 hours of birth for ≥48 hours in each setting with 95% confidence intervals (CI), and used multivariable logistic regression, generating adjusted odds ratios (aOR), to explore associations between maternal characteristics, intrapartum factors and neonatal admission.

Overall 108 (0.8%; CI 0.6-1.1) babies born in AMUs and 161 (0.7%; CI 0.6-0.8) babies born in the ‘community’ were admitted to neonatal care. Nulliparity (aOR 1.1; CI 1.0-2.9) was marginally associated with neonatal admission in babies born in AMUs. In babies born in the ‘community’ setting, nulliparity (aOR 1.5; CI 1.1-2.2), breech presentation (aOR 9.2; CI 3.1-27.3), the presence of complications at the start of labour care (aOR 2.0; CI 1.2-3.3), labour care duration of over 8 hours (aOR 2.4; CI 1.3-4.7), and gestation between 37+0-38+6 weeks (aOR 2.0; CI 1.3-3.2) were all independently associated with an increased chance of neonatal unit admission. In both settings, the most common morbidity in admitted babies was sepsis (59% of babies).

The admission of a baby to a neonatal unit following vaginal birth at term in a midwifery-led setting is relatively uncommon, affecting less than 1 in 100 babies, but is nevertheless a significant event for families. This exploratory study, using secondary analysis of data collected in England in 2008-10, has identified various plausible maternal and intrapartum factors that appear to be associated with an increased odds of neonatal admission in this group, which merit further investigation.

COI Disclosure: None declared
Uterine rupture as a significant impact on both mother and the baby both in terms of mortality and morbidity. Though it is a rare occurrence in modern obstetrics, it is still a risk in women with previous C section. General anaesthesia is mostly considered if these women need a caesarean delivery. Rapid sequence spinal anaesthesia could be considered in women who are suitable.

A 35-year-old woman in her fourth pregnancy with a previous one normal delivery followed by a C section, was admitted to labour ward in spontaneous labour. She was on continuous CTG monitor and was on Diamorphine and Entonox for pain relief during labour. Fetal monitoring was normal all through labour however she started to contract one every two minutes. Seven hours after admission, there was a prolonged deceleration coinciding with a change of pain pattern. There was excessive fetal movements felt by the woman. On examination she was 5 cm dilated with vertex presenting at -2 station. She was taken to theatre for a category one C section with the suspicion of uterine scar dehiscence. She had a spinal anaesthesia and a scar rupture was evident at laparotomy. Baby was delivered within 20 minutes of decision making and was admitted to neonatal unit with a cord pH of 6.97. The woman was ready for the surgery within 4 minutes. The post-operative recovery was uneventful.

Uterine rupture carries a significant risk both to the mum and the baby. Considering training in rapid sequence spinal anaesthetic for such scenarios might help in the woman being involved with the birth of the baby. However, the discussion should happen between the anaesthetist and obstetrician to decide the anaesthesia. Both general and regional anaesthesia have their own merits and demerits and this should be taken into consideration in cases with acute fetal hypoxia.

COI Disclosure: none declared
Persistent occiput posterior position is associated with 18% of intrapartum caesarean sections and a high risk of instrumental vaginal delivery. Manual rotation to the occiput anterior position is a safe and easy to perform procedure which could prevent operative deliveries. Observational studies are promising, but apart from our own pilot study, there has been no randomized controlled trial. The aim was to determine the efficacy of prophylactic manual rotation in the second stage of labour.

This was a double blinded multicentre randomised controlled trial of prophylactic manual rotation early in the 2nd stage of labour for preventing operative delivery compared with a ‘sham’ procedure. The primary outcome was operative delivery (CS, forceps or vacuum). Sample size: 254 women. Eligible criteria were: ≥37 weeks’ gestation, singleton pregnancy, cephalic presentation, and OP position on ultrasound. Outcomes were compared by proportions for categorical data (χ² test), means for normally distributed data (t-test), or rank order for non-parametric data (Mann-Whitney-U test). A planned logistic regression for the primary outcome was undertaken to account for potential confounders.

Results: 254 women were randomised. Analysis was by intention to treat. Results will be presented at the “ECIC” conference, 14-16 March 2019 TURIN.

This is the first randomised controlled trial to assess the efficacy of prophylactic manual rotation in second stage of labour.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 95

TITLE: USING A 360 DEGREE EVALUATION SYSTEM FOR PERFORMANCE APPRAISAL OF MIDWIFERY STUDENTS ON PAYING RESPECT TO THE BILL OF MOTHER’S RIGHTS IN LABOR AND DELIVERY

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CONTENT:
Introduction: The need for Respect to the mother’s rights in labor and delivery are a basic mother’s right. Midwifery student are expected to respect the mother’s rights in labor and delivery, In order to have a precise judgment on performance, a variety of data resources are needed. The aim of this study was to assess of respecting the mother’s rights in labor and delivery by midwifery student by 360° evaluation.

Methods: This Cross-sectional study was conducted on 31 final year undergraduate midwifery students in School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran in 2018. Data collection tools included a valid and reliable demographic questionnaire and mother’s rights in labor and delivery questionnaire. Data analysis was performed in SPSS version 16 at the significance level of P< 0/05.

Results: The results of the study showed that the mean of the total score Respect of mother’s rights in students 150.06 ± 13.17, in parturient 127.64 ± 21.23, in midwife who is responsible for delivery 123.09 ± 19.91 and in mentors 120.45 ± 20.54.

Conclusion: With regard to scores dissimilarity in different groups, the 360-degree instrument appears to be a useful way to evaluate students’ clinical performance and we suggest it as an effective evaluation method.

COI Disclosure: “None declared”
TOPIC: INTRAPARTUM CARE

ID: 96

TITLE: EVALUATION OF PERFORMANCE APPRAISAL OF MIDWIFERY STUDENTS ON PAYING RESPECT TO THE PRIVACY OF MOTHERS IN LABOR AND DELIVERY USING A 360 DEGREE EVALUATION SYSTEM

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CONTENT:

Introduction: Evaluation is one of the most important parts of any educational programs and in this regard, studies emphasize on employing different assessment groups for determining achievement of learning objectives by students. This study was performed to rate of this performance. This study investigated the rate of respecting the mother's privacy in labor and delivery by midwifery student by 360° evaluation.

Methods: this descriptive research was done on 31 final year undergraduate midwifery students in School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran in 2018. Data was collected by Respect to the Privacy questionnaire that content and face validity were confirmed. Using SPSS software, we analyzed by descriptive statistics and statistical tests and the significance level was P< 0.05.

Results: The results of the study showed that the mean of the total score Paying Respect to the Privacy of mothers, in students 44.87 ± 4.1, in parturient 46.83 ± 4.57, in midwife who is responsible for delivery 47.09 ± 9.27 and in mentors 44.45 ± 5.04.

Conclusion: Paying Respect to the Privacy in labor and delivery is observed at moderate level. To enhance the quality of services provided by midwifery students, they should consider care for mothers in labor and delivery while respecting their privacy.

COI Disclosure: “None declared”.

Organising Secretariat:
TOPIC: INTRAPARTUM CARE

ID: 97

TITLE: BIRTHING POSITION DURING THE SECOND STAGE OF LABOUR AND MATERNAL AND FETAL OUTCOMES: A RETROSPECTIVE ANALYSIS OF PROSPECTIVELY COLLECTED DATA IN A SINGLE CENTER

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CONTENT:
There has always been controversy around whether free maternal position during the second stage of labour has advantages for women giving birth to their babies. The aim of this study is to investigate possible benefits and risks of different birthing positions during the second stage of labour, with or without epidural, on maternal and neonatal outcomes.

Retrospective analysis of prospectively collected data of nulliparous women at term delivering in a third level referral center from 2015 to 2018. We investigated the relationship between maternal characteristics and categorical outcomes (assisted vaginal delivery and perineal trauma) using chi-squared test, and continuous outcomes (estimated blood loss; fetal descent duration; 1 and 5-min Apgar scores) with t- and Kruskal-Wallis tests. The independent predictors of each categorical outcome were evaluated using multivariate logistic regression. The association between all covariates and perineal trauma was tested with a polytomous logistic model. We then evaluated the association between all maternal characteristics and continuous outcomes.

Our results on 2240 patients showed that an assisted vaginal delivery was more frequent in older women at later gestational ages, in semi-recumbent position and in those having epidural. Free birthing position was significantly associated with reduction in assisted delivery, in mean blood loss and in duration of fetal descent (p<0.05) independently on the type of anesthesia. Furthermore, women giving birth in a free position had a 2.4 fold increase of having intact perineum compared to women delivering in a semi-recumbent position.

The choice of birthing position is often crucial to customize safe and effective assistance to every single patient during labour in order to reduce maternal and fetal risks. This study performed in a large sample of patients showed that there is clear evidence of the benefit of adopting a free birthing position in nulliparous women regardless the epidural analgesia, with no apparent disadvantages in outcomes for mother or baby.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 98

TITLE: THE EFFECT OF MOTHER-INFANT SKIN TO SKIN CONTACT ON SUCCESS AND DURATION OF FIRST BREASTFEEDING: A SYSTEMATIC REVIEW AND META-ANALYSIS

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3)Ph.D. student of Reproductive Health, Students Research Committee, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran.

CONTENT:
Breastfeeding initiation within the first half hour after birth is one of the World Health Organization recommendations. However, in most hospitals, mother-infant contact and breastfeeding initiation are delayed due to routine mother and infant care. This study aimed to determine the effect of mother-infant skin to skin contact (SSC) immediately after birth on the success rate and duration of the first breastfeeding.

In this review, databases of PubMed, Scopus, Cochrane, Google Scholar, SID and Magiran and reference section of relevant articles were searched for both Persian and English randomized clinical trials during 2000 up to December 2017, using the keywords of “(Breastfeeding OR Lactation) AND (SSC OR KMC) AND (breastfeeding success OR breastfeeding duration)”. A total of nine trials were ultimately included. Data analysis was performed with Comprehensive Meta-analysis (CMA) software version 2.

In total 597 participants were assigned to the intervention group and 553 participants were assigned to the comparison group. Quantitative analysis Based on mean differences or odds ratio showed that Mother-Infant SSC had a significantly positive effect on success in first breastfeeding (MD:1.90, 95%; CI 0.958-2.856; p=0.00, OR: 2.771 95%; CI 1.587-4.838; p=0.00) and first breastfeeding duration (MD:26.627 95%; CI 1.070-52.184; p=0.041).

Mother-infant SSC after birth has beneficial effects on breastfeeding and can increase the success rate and duration of the first lactation. Therefore, the results of this study can be used by health care providers in evidence-based decision-making on ways to increase breastfeeding rates.

COI Disclosure: “None declared”
Shoulder dystocia is an obstetric emergency defined as a vaginal cephalic delivery that requires additional obstetric maneuvers to deliver the fetus after the head has delivered and gentle traction has failed. Studies involving large number of deliveries report incidences between 0.2 to 3% and there can be significant perinatal morbidity and mortality associated with this condition, even when it is managed appropriately.

We present a retrospective review based on 537 case series of shoulder dystocia occurred in the Department of Obstetrics and Gynecology in a single tertiary hospital between January 2010 to December 2017. Information has been obtained by the research of key words such as “shoulder” and “dystocia”, using the Computerized Medical Record.

Several variables have been analyzed: maternal age, parity, Body Mass Index (BMI), weight gain during pregnancy, macrosoma background, gestational age at delivery, estimated fetal weight, fetal gender, spontaneous or induced delivery, indication of induction, time of dilatation and duration of second stage of labour.

The maternal age average resulted in 32.8 years, and 36.8% were older than 35 years. 72% of them were nulliparous. The main BMI was 25.3, and obesity was present in 15% of cases. Up to 32% of the total had an increase weight more than 15 kg during pregnancy. 11% of cases suffered from metabolism hydrocarbon alteration. Induction of labour occurred in up to 43.5% of deliveries, and less than 6% was motivated by diabetes or fetal macrosomia.

In our labor room, we attend an average of 1 to 2 cases of shoulder dystocia weekly. The risk of transitory injury is 5.6%, and permanent injury 1.3%.

Three out of four of our patients with shoulder dystocia didn’t associate any risk factor, and 69% of newborns weighted less than 4000 grams at birth.

These results reinforce the idea of shoulder dystocia as an unpredictable and unavoidable obstetric complication. Obstetrics and midwifes must be prepared to recognize and resolve this situation.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 122

TITLE: "RELATION BETWEEN TIME OF EXPOSURE TO EPIDURAL ANALGESIA DURING LABOR AND TYPE OF BIRTH"

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6. Hospital Del Mar, Barcelona, Spain

CONTENT:
Women experience varying degrees of pain during labor. Depending on an array of factors such as, the type of onset, the environment, preparation and professional support during labor, medical interventions. Several coping strategies for relieving pain in labor exist, Epidural Analgesia (EA) provides effective pain relief although it is an invasive procedure with many associated adverse effects. Our aim was to analysed EA length of exposure in relation with non-spontaneous vaginal births.


Inclusion criteria were childbearing women who had a spontaneous or induced onset of labor with a spontaneous vaginal birth / an instrumental birth/ type II caesarean section of a life singleton infant on cephalic presentation between 37 and 41 weeks gestation in the participating hospitals of the study in the 16 months period process(elective or emergency caesarean section were excluded) Analysis of risk factors for non-spontaneous vaginal birth were stratified by mode of vaginal birth and by parity.

Univariate and multivariate analysis to examine associations between the outcome and covariates.

807 women used (EA) . The same technique for insertion, method of administration (PCEA) and dose of 0.0625% bupivacaine plus 2 mg of fentanyl were used, 75.59% of the women in the study received oxytocin for augmentation of labor, 70.63% of the women in the sample had spontaneous vaginal birth, and 29.37 had non-spontaneous vaginal birth; being 6.57% vacuum delivery, 10.9% forceps delivery and 11.9% caesarean section. In the sample there was a higher rate of primiparous women (56.26% vs. 43.74%).

Average time in primiparous women having a spontaneous vaginal birth was 5.98 hours and in multiparous women this was 3.37 hours.

For non-spontaneous vaginal births, the group of primiparous showed 8.05 hours and for multiparous 6.32 hours.

Length of exposure to EA influences the type of birth in women with an uncomplicated pregnancy and labour is an important consideration for women`s health.

Helping women to cope with the physiological labor pains for longer avoiding having the cascade effect of having to start using EA in an early phase.

This study has identify a critical point for having a non-spontaneous birth. 

important need to re-define “arrest of labor”, so women will have more change to have a spontaneous vaginal birth.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 126

TITLE: ASSESSMENT OF STAN IN THE CONTEXT OF METABOLIC ACIDOSIS

AUTHORS: M-C. Burdin, C. Vayssière, A. Hastoy, P. Guerby

AFFILIATIONS: Pôle Femme-Mère-Couple, Service de gynécologie-obstétrique, Hôpital Paule de Viguier, CHU de Toulouse, Toulouse, France

CONTENT:

STAN is a continuous second line technique based on ST waveform analysis of the fetal ECG. The trials on STAN produced conflicting results with regard to its efficacy despite promising early studies. The objective of this study was to evaluate STAN in the context of metabolic acidosis. If STAN was consistent with the neonatal outcome, we analyzed why the outcome had been metabolic acidosis and if STAN was not consistent with outcome, what was the cause of it.

We conducted a retrospective study on all metabolic acidosis cases between 2009 and 2016 at Toulouse University Hospital. Inclusion criteria were metabolic acidosis concerning patients with singleton pregnancy, in vertex presentation, who began labor after 36 weeks of gestation with STAN as second-line technique. Metabolic acidosis was defined by an arterial pH at cord lower than 7.00 or lower than 7.05 with a basal deficit in extracellular fluid higher than 12mmol / L. CTG were blindly assessed for neonatal outcome, analyzed with normal neonatal outcome and were post hoc classified by a consensus of two experts in the CTG and STAN analysis. (C.V and A.H) The primary outcome was the number of false negative associated with STAN.

132 neonatal metabolic acidosis was found beyond 24,697 patients (0.53%), and 4340 patients were monitored by STAN (17.57%). 32 of 132 patients had STAN as a second-line technique, or 21.96%. The neonatal outcome could be explained by 1 inappropriate STAN application (3.5%), 5 technical errors (17.2%), 8 intercurrent clinical events (27.6%), notably bradycardia, cord prolapse or uterine rupture, 11 human errors with interpretation of CTG and/or STAN (37.9%), 2 adapted treatments after STAN event (6.9%). We found 2 false negative of the STAN or 6.9%, the first record concerned a saltatory CTG during one hour before delivery without STAN event. The second record was a pathological CTG during thirty minutes of active pushing without STAN event.

The false negative STAN rate to detect metabolic acidosis is low in our study, consistent with literature. Less than half of metabolic acidosis was preventable, explained by human errors. This work underlines importance of the CTG analysis and the follow-up of recommendations for use of STAN. Therefore, it is necessary to insist on an initial training followed by continuous support: the CTG analysis first, then the use of the STAN, in order to reduce the fetal scalp pH less and less recommended.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 129

TITLE: THE UK MIDWIFERY STUDY SYSTEM (UKMidSS): A NATIONAL INFRASTRUCTURE FOR INVESTIGATING SAFETY AND QUALITY OF CARE IN MIDWIFERY UNITS

AUTHORS: R. Rowe 1; on behalf of UK Midwifery Study System (UKMidSS)

AFFILIATIONS: 1 National Perinatal Epidemiology Unit, University of Oxford, Oxford, UK

CONTENT: There is good evidence on the benefits of midwifery-led intrapartum care, increasing numbers of midwifery units (MUs), a continuing need to generate evidence to inform practice and improve care, and poor routine data. The UK Midwifery Study System (UKMidSS) is a national research system for MUs, currently involving all UK alongside midwifery units (AMUs). UKMidSS studies have investigated outcomes in women with BMI>35kg/m² admitted to AMUs and risk factors for neonatal admission after AMU birth.

UKMidSS uses methods similar to the UK Obstetric Surveillance System (UKOSS) for national prospective observational studies/surveys in MUs. In all UK AMUs midwives report cases for the current UKMidSS study and numbers of admissions/births in response to monthly emails, and enter anonymised data online for cases and comparison women. In the UKMidSS Severe Obesity Study we identified and collected data about 1122 women with booking BMI>35kg/m², admitted for labour care in all 122 UK AMUs in 2016, and 1949 comparison women with booking BMI≤35kg/m² admitted to the same AMUs. In the UKMidSS Neonatal Admission Study we identified and collected data about all women whose baby was admitted to neonatal care after birth in an AMU, March 2017-Feb 2018.

All UK AMUs have contributed data to the first UKMidSS studies. Response to monthly reporting emails was 99% for the Severe Obesity Study and 100% for the Neonatal Admission Study. In the Severe Obesity Study 92% of the severely obese cohort had a BMI 35.1-40kg/m². Severely obese multiparous women were no more likely than comparison women to experience the primary outcome (one or more of: augmentation, instrumental birth, Caesarean, maternal blood transfusion, 3rd/4th degree tear, maternal admission to higher level care) (5.6% vs. 8.1%, aRR=0.68, 95% CI 0.44-1.07). High proportions of severely obese women had a ‘straightforward vaginal birth’ (nulliparous 67.9%; multiparous 96.3%). Analysis of Neonatal Admission Study data is ongoing.

Engagement with UKMidSS demonstrates enthusiasm for generating evidence to inform and improve midwifery practice. The Severe Obesity Study results show that for women with a BMI between 35 and 40 who have given birth before, planning birth in an AMU can be just as safe as for women with a lower BMI, with benefits in terms of reduced intervention and better experience. Other current and forthcoming studies, including plans for extending to include freestanding midwifery units, will be presented.

COI Disclosure: This abstract presents independent research arising from a National Institute for Health Research (NIHR) Post Doctoral Fellowship awarded to Rachel Rowe (PDF-2014-07-006). The views expressed are those of the author and not necessarily those of the NHS, t
Shoulder dystocia is an obstetric emergency defined as a vaginal cephalic delivery that requires additional obstetric maneuvers to deliver the fetus after the head has delivered and gentle traction has failed. This situation may lead to relevant fetal and maternal morbidity-mortality and also to legal implications.

We illustrate a retrospective study based on 537 case series of shoulder dystocia occurred in the Department of Obstetrics and Gynecology in a single tertiary hospital between 2010 to 2017. Information has been obtained by the research of key words such as “shoulder” and dystocia”, using the Computerized Medical Record.

We verified wether diverse variables have been collected or not in our digital data base for delivery and newborn files in cases of shoulder dystocia: pelvic anomalies, diabetes, estimated fetal weight, anterior or posterior shoulder dystocia, time of fetal head delivery, time of fetal body delivery, Kristeller maneuver, gentle axial traction, number of maneuvers performed, staff informed and information given to the patient.

Analyzing our shoulder dystocia clinical reports from the Computerized Medical Record, we found described around 60% of items recommended by scientific societies. However, real important data, such as time of fetal head delivery, periods between fetal head and body delivery), are frequently missing. As a matter of fact, it is observed that the more maneuvers performed (presumably more severe shoulder dystocia cases), the more number of items are documented.

As the years have passed and despite the recommendations of the scientific societies, we have not improved in the collection of data on DH episodes. Collected data after an episode of DH increases as the number of maneuvers performed to resolve the emergency increases.

Shoulder dystocia is an obstetric emergency than can cause medical and legal implications. Accurate information provided to patients and documentation compiled in the Computerized Medical Record are essential aspects. In order to minimize clinical and legitimate risks, we recommend the implementation of a checklist system to fill in after a shoulder dystocia complication.

COI Disclosure: None declared
Shoulder dystocia is an obstetric emergency defined as a vaginal cephalic delivery that requires additional obstetric maneuvers to deliver the fetus after the head has delivered and gentle traction has failed. Different maneuvers have been described in literature, all of them aimed to resolve this situation. However, there is lack of data in support of any kind of more effective maneuver.

We present a retrospective study of 537 case series of shoulder dystocia occurred in a single tertiary hospital between January 2010 to December 2017. Two variables have been reviewed. In one hand, newborn destination to Neonatal Intensive Care Unit (NICU), Intermediate Care Unit (ICU) or to Ordinary Admission to Maternal Unit (OAMU). And in the other hand the presence or absence of brachial injury (transitory or permanent). Both of these variables were analyzed according to the number of the maneuvers performed to resolve shoulder dystocia.

Regarding to newborn destination, single maneuver group had 1.44% of admission in ICU and 0.48% in NICU. In the group of two maneuvers, it existed 95.68% risk of admission in ICU 2.36% and 1.96% in NICU. When three or more maneuvers were carried out, we observe a risk up to 6.35% for admission in NICU and 6.35% in ICU. Transitory brachial injury risk was 0.48% in single maneuver group and 6.35% in three or more maneuvers (no greater risk observed in two maneuvers group). In absolute numbers, 17 cases of transitory and 3 cases of permanent brachial injury were diagnosed in the groups of one or two maneuvers. Moreover, 13 cases of transitory and 4 cases of permanent brachial injury were identified in three or more maneuvers group.

In our study population, the greater number of maneuvers is needed to resolve an event of shoulder dystocia, the strongest is its association not only to a larger number of newborns admitted in NICU and ICU, but also to a higher risk for transit and permanent brachial injury. Besides, it is crucial to be aware that there is no innocuous maneuver due to the fact that there are cases of brachial damage even in cases in which just one single maneuver has been performed.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 147

TITLE: THE ASSOCIATION BETWEEN LACTATE IN FETAL SCALP BLOOD AND AMNIOTIC FLUID, AND ADVERSE NEONATAL OUTCOME AT DELIVERY

AUTHORS: E Wiberg-Itzel

AFFILIATIONS: Women’s clinic, Sodersjukhuset, Department of Clinical Science and Education Karolinska Institute, Sweden

CONTENT:
Lactate in fetal scalp blood is used for fetal surveillance and has a high level of false positive results. In >90% of deliveries where the method is used, a healthy new-born is delivered after an intervention that sometimes is perceived as unnecessary. The Amniotic Fluid lactate (AFL) reflects the metabolic status of the utero-placental unit. In this study, the levels of lactate in these two compartments have been analyzed, and their association to the fetal outcome have been compared.

A prospective study was performed at Soder Hospital in Stockholm 2014-2016. Healthy women with full-term, singleton pregnancies in a cephalic presentation were included. Fetal scalp blood for lactate analyze was sampled due to an affected Ctg curve. At the same time a sample of amniotic fluid was collected vaginally and analyzed blinded at the bedside.

A composite morbidity score for adverse neonatal outcome was constructed, included one or more of following factors; pH<7.05, Apgar<7'5 minutes, transfer to NICU, HIE. The deliveries were handled on the basis of the obtained lactate value in fetal scalp blood.

217 samples of fetal scalp blood and amniotic fluid were collected. 12% of these (26/217) deliveries met the criteria of a composite fetal morbidity. Out of them only 30.8% (8/26) had a high level of lactate in fetal scalp blood (>4.8 mmol/l) at the time of sampling. When the level of lactate in amniotic fluid was analyzed 25/26 (96.2%) deliveries in the composite morbidity group was found among them with an AFL level >=10.1 mmol/l. In the group with a composite morbidity and a high level of fetal blood lactate >4.8 mmol/l all of them had also a high level of AFL >=10.1 mmol/l at the time of sampling.

A higher frequency of deliveries with a high AFL was found compared with those with a high level of lactate in scalp blood (132 vs. 46).

A high AFL level, sampled due to an affected Ctg curve during labor, appears to be a new factor to take in to consideration in fetal monitoring during active labor

COI Disclosure: Collaboration with the Company Obstecare No employment, stocks or salary from the company
In vaginal deliveries, late cord clamping prevents neonatal hypovolemia and it favors a safe fetal cardio-pulmonary transition at birth, and it reduces anemia during the first 6 months of life. Data on which factors affect placental transfusion in cesarean section (CS) are lacking. Our aim was to compare delayed umbilical cord clamping (dUCC), cord milking (UCM) and early cord clamping (eUCC) on placental-fetal transfusion in a cohort of CS.

A prospective observational study of all singleton term pregnancies that underwent CS in 2 Community Hospitals over 1 year. dUCC was recommended after the first breath of the neonate and at least 60 seconds after birth. UCM was indicated when waiting more than 60 seconds was deemed unsafe and it consisted of 3 squeezes of 20 cm on the unclamped umbilical cord. Neonatal hematocrit (Hct) at 48 hours was used as an indicator of placental-fetal transfusion. Multivariate analysis was used to control for confounding factors. Power analysis indicated that 25 cases were needed in each group to demonstrate a difference in Hct of at least 4%.

Of the 216 CS in the cohort, 97 were in labor and 119 elective. dUCC was performed in 135, eUCC in 69 cases, of which 16 UCM. The mean clamping time in the eUCC (with or without UCM) was 27±12 sec, in the dUCC it was 62± 8 sec. eUCC was more frequent during CS in labor (34/97, 35%) vs elective (26/119, 21.8%) (p= 0.02). Mean neonatal Hct was significantly associated with type of CS (59.6± 6.1% for CS in labor vs 56.8±5.9% for elective CS, p= 0.03), UCM (p=0.03) and birth weight (p=0.005), CS in labor (p=0.004) and birth weight (p=0.000) were independently associated with Hct, with UCM approaching significance (p=0.084). UCM and dUCC did not negatively affect maternal blood loss, neonatal bilirubin level or need for phototherapy.

In term infants delivered by CS, neonatal Hct is significantly higher when the CS is performed in labor or in case of UCM.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 160

TITLE: THE EFFECT OF ICE MASSAGE APPLIED TO THE HAND DURING EPISIOTOMY REPAIR ON PERCEIVED PAIN

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AFFILIATIONS: Selcuk University, Faculty Of Health Sciences, Midwifery Department, Konya, Turkey

CONTENT:
Perineal damage during episiotomy causes perineal pain. In order to minimize this level of pain, local anesthetic agents are administered to the episiotomy region. It is known that many non-pharmacological techniques are applied to reduce the pain of birth. One of these methods is the application of pressure to LI4 point on hand with ice. In this study, it was aimed to examine the effect of ice massage applied to the hand during episiotomy repair on perceived pain.

The study was carried out in the delivery unit between April 15, 2018 and November 15, 2018 with vaginal delivery, with the study group being 45 and the control group being 60 with 105 women. Immediately before the episiotomy repair was started, women assigned to the study (massage) group were asked to place plastic gloves filled with ice pieces in the LI4 point on hand. The ice massage was repeated until the episiotomy repair was over. Women were asked to mark the perceived pain level before the application and at the end of the application using the VAS (Visual Analog Scale). In the control group women were not excluded from routine practice; women were asked to mark the perceived pain level using the VAS like the study group.

The mean age of women participating in the study was 25, 1% of them were college/university graduates and 99% of them did not work in any job. It was determined that 86% of the women had their first pregnancy and 80% wanted pregnancy. The difference between the mean VAS scores of the women in the massage and control groups before ice application was not found significant but after ice application the difference between the mean VAS scores of the women in the massage and control groups was found significant.

It was determined that the ice massage applied by hand during episiotomy repair significantly reduced the perceived pain level.

Episiotomy is the most common surgical intervention during vaginal delivery. Perineal damage during this incision causes perineal pain; pain and anxiety levels of women increase during episiotomy repair as well as during labor and delivery. In addition to intrapartum period, pain management should be given importance during episiotomy repair and nonpharmacological technics should be applied by midwives.

COI Disclosure: None declared.
TOPIC: INTRAPARTUM CARE

ID: 170

TITLE: UTERINE TORSION IN THE THIRD TRIMESTER: A CHALLENGING INTRA OPERATIVE CASE REPORT

AUTHORS: C. Aung 1, L. Kasaven 1, C. Atabi 1, G. Gurung 1, A. Shah 1, S. Sadoon 2

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CONTENT:
Uterine torsion is uncommon and can be a potential intra operative challenge. It has been described in all trimesters, as well as in non-pregnant women. Clinical manifestations vary depending on the degree of torsion. Early surgical intervention including laparotomy prevents maternal mortality and severe morbidity. Here, we report a 38-year-old woman, at 33 weeks of pregnancy in advanced labour who was found to have malpresentation of fetus and uterus rotated 180 degrees left to right.

A 38-year-old woman in her first pregnancy presented to the labour ward at 33 weeks gestation with history of ruptured membranes. Her antenatal events were uncomplicated. There was no evidence of fibroids on scan and placenta was posterior and high. She had no significant medical or surgical history of note. She had a normal body mass index of 24 and was a non-smoker. She was admitted at 33 weeks to the delivery suite with intermittent painful contractions. Internal examination confirmed clear liquor draining with the cervix dilating approximately to 4 cm. After detailed discussion with the woman and her partner, a decision was made for emergency caesarean section.

Caesarean section was performed under spinal anaesthetic and the findings were 180 degrees dextrorotation of the uterus, with round ligament and left fallopian tube and ovaries in the center of the operating field and this made it difficult to correct. There were some omental adhesions at the posterior surface of the uterus. Careful adhesiolysis was done with fine scissors and dextrorotation correction was attempted to no avail. A live baby was delivered through a classical incision on the posterior layer of uterus. A three-layer closure of the uterus was undertaken with Vicryl number 1. Haemostats was secured and the blood loss was moderate at 600 ml. The woman made an uneventful recovery in the postnatal ward and the baby stayed in the special care for four weeks and was discharged in good health.

Correction of the torsion in the third trimester pregnancy can be extremely challenging. This can be further complicated by uterine size, fibroids, and presence of severe endometriosis or adhesions. There is not enough evidence in literature for the management of future pregnancy including mode of delivery. Nevertheless, this case adds to the growing evidence that diligent management of such a rare event with a timely laparotomy will reduce the maternal and fetal morbidity and/or mortality.

COI Disclosure: None
TOPIC: INTRAPARTUM CARE

ID: 172

TITLE: LATERAL EPISIOTOMY VERSUS NO EPISIOTOMY TO REDUCE OBSTETRIC ANAL SPHINCTER INJURY IN VACUUM ASSISTED DELIVERY IN NULLIPAROUS WOMEN: AN ONGOING MULTICENTER RANDOMIZED CONTROLLED TRIAL

AUTHORS: S Bergendahl 1; V Ankarcrona 1; S Hesselman 2,3; Å Leijonhufvud 4; M Jonsson 3; S Karlström 5; T Wallström 6; H Kopp Kaliner 1,7; S Brismar Wendel 1,8

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CONTENT:
The rate of obstetric anal sphincter injuries (OASIS) is high in nulliparous women, notably in vacuum extraction (VE) and forceps delivery. Lateral or mediolateral episiotomy may reduce OASIS at VE in nulliparous women. However, the use of episiotomy is highly variable, and the long-term consequences of episiotomy are uncertain. This trial will investigate if lateral episiotomy can reduce the rate of OASIS at VE in nulliparous women and will also assess short- and long-term effects.

This is a randomized controlled trial of lateral episiotomy versus no episiotomy at VE in nulliparous women with a single, live fetus, ≥34+0 weeks. The primary outcome is OASIS by clinical diagnosis. To demonstrate a 50% reduction in OASIS (from 12.4% to 6.2%), 710 women will be randomized at 1:1 ratio. Secondary outcomes are blood loss, complications, neonatal outcomes using register data, pain, pelvic floor and sexual function, quality of life, childbirth experience using web-based questionnaires (baseline, two months, one year, and five years). A subset of women receive follow-up by pelvic floor 2D/3D ultrasound. Mode of delivery and recurrence of OASIS/episiotomy in subsequent pregnancies will also be assessed using register data.

The trial started in July 2017, after appropriate registration, ethical approval, and funding. The trial is open for enrollment and now includes five hospitals in Sweden, managing approximately 1300 nulliparous VEs annually. Additional hospitals are joining the trial in 2019. Women are interested in participation, but recruitment has initially been slow (n=64 in Dec 2018). The predominant restrictive view of caregivers on episiotomy may be one cause, organization of antenatal care another. In addition to outreach activities and information on trial background and objectives to both pregnant women and caregivers, we are undertaking a sub-study of women’s and caregivers’ experience from the recruitment process and view on episiotomy in VE.

The main strength of this ongoing trial is the multcenter randomized trial design, which will provide high-grade evidence for routine lateral episiotomy or for avoiding episiotomy at VE in nulliparous women. Another strength is the setting, enabling a realistic sample size. Furthermore, this study will also assess long-term outcomes of routine or no episiotomy at VE in nulliparous women. We welcome national and international collaborators to help complete the trial.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 174

TITLE: MUSIC THERAPY DURING LABOUR

AUTHORS: E. Caravaca Nieta, M. Casajoana Guerrero, MI Martinez Madrigal, I Cots Paltor

AFFILIATIONS: Midwives in Corporacio Sanitaria Parc Tauli (Sabadell- Barcelona- Spain)

CONTENT:
The effects of music in human behaviour have been evident from the beginning of humanity. The music has been and is a mode of expression and communication between people and because of the emotional effects it has been used as an instrument to control human conducts. We would like to do a research about the effect of music during childbirth to know if it has any effects on women labouring

Done a literature review about the effect of music during labour, searching in different databases

The Cochrane library made a revision in 2018 and noticed that in two studies comparing pain levels, the music therapy group has less sensation of pain that the random group during the latent phase of labour, but the same pain in the active stage. During the research we found that the music therapy increases maternal secretion of neurotransmitters such as serotonin (leads to a state of relaxation) and acetylcholine (has cardiovascular effects). In return, listening to pleasant music reduces the secretion of cortisol (stress hormone)

In conclusion, the findings say that music during labour is an acceptable strategy and non-medical source against pain and to reduce anxiety. About cesarean section, the published literature only mentions programmed surgery. It says that listening music just before intervention reduces blood pressure and heart rate.

So, the music therapy is an important alternative in non-pharmacological analgesia easy to use, cheap and works quick for labouring women

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 175

TITLE: FASTING DURING LABOUR: WHAT'S NEW TEN YEARS LATER?

AUTHORS: M Casajoana Guerrero, E Caravaca Nieto, MI Martinez Madrigal, I Cots Paltor

AFFILIATIONS: Midwives in Corporacio Sanitaria Parc Tauli (Sabadell-Barcelona-Spain)

CONTENT:
Ten years ago in our country was quite normal not to have anything to eat or drink during childbirth. Then we made a literature review to know what was the truth about the “nil by mouth” policy we had in our hospitals and developed a guideline of what our labouring women could have to drink. Now, ten years later we want to investigate if the literature says something new about this.

We made a research in different international databases such as: Cochrane Library, MIDIRS, PubMed and SEGO (Spanish gynaecological and obstetrics society). We found different studies and a systematic review from Cochrane Library.

Ten years on, the new literature existing has found the same results as before. There should not be restriction to eat or drink during labour in low risk women, letting them choose what they wish to eat or drink.

In conclusion, in our hospitals we only let women drink isotonic drinks, water or apple juice but the existing literature recommends not to restrict fluids or food, women should have freedom to say what they need as the literature did identify no benefits or harms associated with this. Although, they say more research is needed about this topic.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 181

TITLE: DEVELOPMENT AND VALIDATION OF THE DUTCH VERSION OF THE MOBILE APPLICATION RATING SCALE (MARS): A PILOT STUDY ON PREGNANCY APPS

AUTHORS: I. Tency 1
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3 Ghent University, Faculty of Medicine and Health Sciences, Department of Public Health, Unit of Medical Informatics and Statistics, Ghent, Belgium

CONTENT:
Mobile technology is an increasing source of information, resulting in a steadily growth of health apps. Health professionals are concerned about the quality of apps. A generally accepted, reliable tool for evaluating health apps is the Mobile Application Rating Scale (MARS). However, there is no validated Dutch tool. This pilot study investigated the usefulness of a Dutch MARS for assessing the quality of pregnancy apps (including intrapartum information) and its psychometric properties.

The original 23-item MARS, consisting of four objective subscales (engagement, functionality, aesthetics, information) and one subjective dimension, was translated and adapted according to the WHO-guideline ‘Translation and adaptation of instruments’. Nineteen most downloaded pregnancy apps (Google Play Store) were evaluated independently by two raters at two time points, after following an online training module and a pilot test on 5 apps. MARS total/subscale scores were calculated. Standard error of measurement values (SEM) were used to assess absolute reliability. The inter- and intrarater reliability (Wilcoxon signed-rank tests, intraclass correlation coefficients) and internal consistency (Cronbach’s alpha) were determined.

Moderate to excellent inter- (0.672–0.765) and intrarater reliability (0.794–0.921) were found for the total score and the subjective part (0.601–0.761 resp. 0.729–0.882). The absolute reliability showed low %SEMs, indicating good reliability. The reliability for the subscale scores varied from poor to good, with poor intraclass correlation coefficients in the functionality subscale. However, the absolute reliability of this subscale showed good %SEM. Internal consistency was acceptable for all subscales and the subjective part (0.786–0.943), except for the functionality subscale (0.010–0.596).

Our results were similar to those in the original study, except for the functionality subscale. This may indicate that the Dutch MARS is a reliable tool for rating the quality of pregnancy apps. However, further research is needed to optimize the instrument (e.g. functionality subscale) and to evaluate its psychometric properties (e.g. validity) on a larger number of apps. Also the usability of the MARS by health professionals and the implementation in daily practice should be further explored.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 182

TITLE: MEDICALIZATION IN NORMAL, UNCOMPLICATED CHILDBIRTH – AND THE CONTRIBUTION OF MIDWIVES?

AUTHORS: M. Nielsen

AFFILIATIONS: Midwifery education, Copenhagen University College, Sigurdsgade 26, 2200 Copenhagen N Denmark

CONTENT:
Since 1960’s the usage of electronically fetal heart monitoring (EFM) has increased and is now widely used, both in uncomplicated, activated by midwives, and in complicated deliveries, activated on the basis of guidelines. Medicalization has contributed to the treatment of pathological problems, but several studies have also shown that medicalization has an impact on the normal uncomplicated childbirth with the result of more interventions.

The objective of this study is to explore the role of midwives in medicalization of normal childbirth. A literature study has been carried out in order to explore how EFM as an institutional practice is carried out by midwives in relation to uncomplicated childbirth. The evidence behind the usage of EFM compared with the Doppler and the pinard during the normal and uncomplicated delivery is explored. Further a survey amongst midwifery students is carried out in order to explore their clinical experiences and practice with EFM, the Pinard and the Doppler during normal, uncomplicated delivery.

The first part of the literature study shows that midwives to a high degree bring EFM into usage during the normal, uncomplicated delivery. The other part of the literature study shows that and there is no evidence for using EFM during a normal and uncomplicated delivery compared to the Pinard but that the rate of caesarean section will increase. Further the use of EFM does not improve perinatal outcomes. The survey amongst the midwifery students and their clinical experiences and practice with EFM, the Pinard and the Doppler is currently ongoing and the results will be presented at the conference.

There is no evidence for using EFM during the uncomplicated delivery. Nevertheless the use of EFM is widely used by the midwives. This practice is passed on to midwifery students. The results of the survey will be discussed in relation to practicing midwifery in different beliefs systems, a medical and a midwifery based belief system. Midwives should discuss the way fetal heart monitoring is carried out, the evidence behind and the institutional practice passed on to midwifery students

COI Disclosure: None declared
TITLE: IMPACT OF IMPLEMENTATION OF AN INTENSE PHYSIOLOGY-BASED CTG INTERPRETATION ON PERINATAL OUTCOMES

AUTHORS: Halder N.1; Shankar L. R.2; Clement-Thomas S.3

AFFILIATIONS: Hwyel Dda University Health Board, Wales, United Kingdom

CONTENT:
Cardiotocograph (CTG) interpretation based on ‘pattern recognition’ may lead to significant inter and intra-observer variability in interpretation, leading to poor perinatal outcomes. Physiological interpretation of CTG was introduced and actively promoted in our Health Board with 3300 deliveries in 2017.

A full-day CTG Masterclass based on deeper understanding of fetal physiology was introduced by our Health Board organised for internal and external delegates every 6 months since February 2017 that all maternity caregivers are expected to attend at least once annually. Weekly in-house CTG reflection meetings were also introduced with formal login of discussion and learning points in SBAR format connecting all 3 sites through telecom. A retrospective analysis of perinatal outcomes before and after the training was carried out.

Stillbirths in over 24 weeks gestation was 20 in 2016, 13 in 2017 and 13 in 2018, whereas the early neonatal deaths was 3, 3 and 2, in 2016, 2017 and 2018, respectively. Compared to the All Wales Neonatal Network unexpected Special Care Baby Unit (SCBU) admissions at 5.1%, our rate was 3% - 3.5%.

After the introduction of an intense physiology-based CTG interpretation, there has been a trend towards a reduction in term stillbirths. In addition, our rate of unexpected admission to the SCBU (3-3.5%) was lower than the reported rate by the All Wales Neonatal Network (5.1%).

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 197

TITLE: MULTICENTER RANDOMIZED CONTROLLED TRIAL ASSESSING THE IMPACT OF A CERVICAL TRACTION MANEUVER (AMR’S MANEUVER) ON THE INCIDENCE OF POSTPARTUM HEMORRHAGE.


AFFILIATIONS: 1 Department of Gynecology and Obstetrics, Shoubra Hospital, Cairo, Egypt. 2 Department of Reproductive Health, National Research Centre, Giza, Egypt. 3 Department of Gynecology and Obstetrics, Faculty of Medicine, Cairo University, Cairo, Egypt. 4 Department of Gynecology and Obstetrics, Faculty of Medicine, October 6th University, Giza, Egypt. 5 ClinAmygate, Cairo, Egypt.

CONTENT:

OBJECTIVE: To assess the impact of a cervical traction maneuver (Amr’s maneuver) used in conjunction with active management of the third stage of labor (AMTSL) on the incidence of postpartum hemorrhage (PPH).

The present multicenter randomized controlled trial was conducted in Cairo between March 1, 2016, and June 30, 2017. Women aged at least 18 years who had singleton pregnancies and were candidates for vaginal delivery were enrolled. After block randomization, AMTSL was performed for all participants. Following placental delivery, Amr’s maneuver using cervical traction for 90 seconds was carried out in the study group. The primary outcome, incidence of PPH (>500 mL blood loss) within 6 hours of delivery, was compared between the study and control groups in an intention-to-treat analysis.

There were 852 patients randomized to the study (n=426) and control (n=426) groups. The incidence of PPH was significantly lower in the study group compared with the control group (6 [1.4%] vs 19 [4.5%]; P=0.015). Absolute risk reduction of 3.1% (95% CI 0.8 - 5.6), relative risk reduction of 0.32 (95% CI 0.13 - 0.78), and number needed to treat of 33 (95% CI 129 - 18) were observed in the study group.

Amr’s maneuver was effective in decreasing the incidence of PPH. ClinicalTrials.gov Identifier: NCT02660567

COI Disclosure: none declared
TOPIC: INTRAPARTUM CARE

ID: 201

TITLE: MOBILITY IN LABOR WITH AND WITHOUT EPIDURAL ANALGESIA: PRELIMINARY RESULTS

AUTHORS: S Simeone1, M Ronchetti2, V Marcellino3, M P Rambaldi1, S Ottanelli1, C Serena1, S Vannuccini4, S, M Sicurani3, U Bitossi3, F Petraglia6, M Micaglio3 and F Mecacci1

AFFILIATIONS: 1 High Risk Pregnancy UNIT – Careggi University Hospital, Florence, Italy
2 Midwifery University course – University of Florence, Florence, Italy
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4 Department of Molecular and Developmental Medicine, University of Siena, Siena, Italy
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6 Department of Biomedical, Experimental and Clinical Sciences “Mario Serio”- University of Florence, Florence, Italy

CONTENT:
According to WHO guidelines, mobility and upright position in labor are strongly encouraged, because of the significant impact on the reduction of cesarean section rates1. Evidence has been provided by a Cochrane systematic review of 25 trials on women at low risk2.

The main aim of our study was to assess mobility in labor, in women with and without epidural analgesia (EA), and to build an appropriate score of evaluation. Maternal-fetal labor outcomes were analyzed as secondary aim.

This prospective observational study compares mobility in labor in unselected (low/high risk) women in active labor, with and without EA. Patients were enrolled at admission and divided into two groups, based on woman’s choice of having EA or not. The groups were compared in terms of spontaneous and suggested mobility. A dedicated score was built to objectively assess maternal mobility (MS), also including parity, labor induction (IOL), cervical dilation at diagnosis, positions during 1st and 2nd stage of labor, position changes, spontaneous mobility and urination, walking, pushing. Secondary analysis compared maternal-fetal outcomes: CS rate, perineal tears (PT), 1st and 2nd stage duration, neonatal outcome.

The study compared 65 women with EA (39%) vs 100 women (61%) without medical pain control. Nulliparous women were 61% of the participants (EA=80%), while 39% had parity>1 (20% EA). IOL involved 68% of cases (43% EA). The mean value of MS resulted 21.8±3.2 in EA group vs 23.6±2.6 in no-EA; p=0.07. Spontaneous mobility characterized 3% of the participants with EA vs. 20% of controls. CS percentage was 10%; episiotomy 12%, 1st/2nd degree perineal tear 55%. 1st stage was longer in multiparous women with EA; 2nd stage duration was similar between the groups. According to logistic regression, EA did not influence CS rates (OR 0.6 95% CI). IOL showed a significant correlation with PT (OR=8.1 for 2nd degree), episiotomy (OR=6.43) and CS (OR=3.3).

According to preliminary results, epidural analgesia does not significantly affect women’s mobility in labor. In addition, it does not increase the risk of cesarean section and adverse maternal-fetal outcomes, even in women who were not selected as high or low risk. There is a significant difference in terms of spontaneous mobility, therefore it may be suggested that medical and midwife assistance to labor should be focused on encouraging women to move and change positions.

COI Disclosure: none declared
TOPIC: INTRAPARTUM CARE

ID: 203

TITLE: MIDWIFE INTERVENTIONS IN THE PROMOTION OF NORMAL LABOUR THROUGH THE FREEDOM OF MOVEMENTS

AUTHORS: V.CARDOSO1; M.MARTINS2; M.NÉNÉ3

AFFILIATIONS: 1, 2 - Hospital Professor Doutor Fernando Fonseca EPE, Amadora, Portugal
3 - Escola Superior de Saúde da Cruz Vermelha Portuguesa

CONTENT:
The return to natural childbirth is a reality since women assume a more active role during their labor and delivery, further humanizing this process and often discharging medical intervention, namely in regard to their freedom of movements and adoption of upright positions during labor. This new trend made it necessary to know how vertical positions and freedom of movement influence maternal and neonatal outcomes. Aim: To Analyze the influence of the upright position during labor and birth.

Systematic literature review with the research question: What are the advantages of freedom of movement in promoting eutocic delivery? Throught the PI[C]IOS method, using the databases present in EBSCOhost, (CINAHL and MEDLINE) and BIREME, with the time limit between January 2012 and October 2018 and the research equation: birthing position and labor and childbirth. Inclusion criteria were considered free full text articles in English, Spanish and Portugese related to the study topic. It were found 57 articles. After analysis and application of the inclusion criteria by two reviewers and submitted to the evaluation of the quality and degree of evidence, 7 articles were selected as a sample.

One of the studies, collected information about the women’s sense of control and intensity of pain during childbirth, combined with the freedom of movements in the second stage. Other 2012 study explored the preferences of woman’s related with birth positions especially those who preferred non supine positions. Two Cochrane reviews of 2012 and 2013 compared the effects of vertical and horizontal positions with the aim of understand in what way the maternal position affects the birth process and maternal and neonatal outcomes.

The freedom of movement during labor and childbirth is associated with maternal benefits, such as reducing the duration of labor, pain relief and parturient satisfaction. Although the hemorrhage is superior comparing to non-vertical positions, the difference is not a justification for not promoting freedom of movement. As neonatal benefits, better APGAR, a lower incidence of arrhythmias, and better pH stabilization due to lower compression of the fetal head were found as results.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 206

TITLE: EPISIOTOMY IN NULLIPAROUS VACUUM DELIVERY DOES NOT INCREASE THE RISK OF ANTEPARTUM CESAREAN SECTION IN SUBSEQUENT DELIVERY

AUTHORS: S. Brismar Wendel 1,2; S. Bergendahl 1; C. Liu 2; O. Stephansson 2

AFFILIATIONS: 1 Department of Clinical Sciences, Karolinska Institutet, Danderyd Hospital, Stockholm, Sweden. 2 Clinical Epidemiology Division, Department of Medicine, Karolinska Institutet, Stockholm, Sweden.

CONTENT:
Women who sustain obstetric anal sphincter injuries (OASIS) have an increased rate of antepartum cesarean section in subsequent births. OASIS is common in nulliparous women with operative vaginal delivery and mediolateral or lateral episiotomy may reduce OASIS in these women. The effect of episiotomy on future mode of delivery is unknown. Our aim is to assess if episiotomy at vacuum assisted delivery in nulliparous women increase antepartum cesarean section rate in subsequent childbirth.

This is a nationwide cohort from the Swedish Medical Birth Register including women who gave birth to a first child with vacuum extraction (VE) and a second child during 2000-2014. Both births included a live, single fetus, without malformations, ≥ 34 gestational weeks, in cephalic presentation. The final cohort consisted of 44,656 women with a first birth by VE and a mediolateral/lateral episiotomy (31.2%) or no episiotomy (68.8%). To assess the association between episiotomy at VE in the first birth and antepartum cesarean section in the subsequent delivery, we performed univariate and multivariate unconditional logistic regression analyses, and inverse probability of treatment weights analysis.

In total, antepartum cesarean section at second birth was performed in 2,654 (5.9%) women. Of women who had an episiotomy at the first VE birth, 824 (5.9%) had an antepartum cesarean section in the second birth, compared to 1,830 (6.0%) of women who did not have an episiotomy (OR 1.00, 95%CI 0.99-1.01, adjusted OR 1.00, 95%CI 0.83-1.20). For comparison, women who sustained an OASIS at the first VE birth, 1,275 (20.6%) had an antepartum cesarean section in the second birth, compared to 1,379 (3.6%) of women who did not sustain an OASIS (OR 7.00, 95%CI 6.45-7.60, adjusted OR 6.57, 95%CI 5.97-7.23).

Mediolateral or lateral episiotomy, to prevent OASIS in vacuum assisted delivery in nulliparous women, is not associated with increased antepartum cesarean section rate in subsequent childbirth. OASIS in a first vacuum assisted birth increase the risk of antepartum cesarean section more than six times.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 212

TITLE: IMPACT OF "STAN EVENTS" ON CORD BLOOD ACIDOSIS AT DELIVERY

AUTHORS: M.Vettore1; V.Zanardo2; P.Guerrini3; G.Straface4

AFFILIATIONS: 1Division of Perinatal Medicine, Policlinico Abano Terme, Italy

CONTENT:
ST Analisys (STAN) has been developed to improve specificity in identifying fetuses at risk for intrapartum asphyxia. A baseline T/QRS rise usually indicates that the fetus is utilising anaerobic metabolism. Thus, if the CTG is normal then no action is required with any STAN event. Adrenaline surge stimulates the heart to increase its pumping activity and induce T waves changes. This study aimed to test arterial cord blood metabolic acidosis at delivery after STAN events with normal intrapartum CTG.

This was a prospective observational study to evaluate the role of ‘STAN events’ during normal CTG on arterial cord blood hypoxemia, acidosis (pH, PaO2, PaCO2, HCO3-, and EB), and lactacidemia, respectively. The study was conducted at the Policlinico Abano Terme (Italy). The whole study consisted 50 ‘STAN events’ registered during 2 hours before delivery (Mea + SD, 98 + 48 minutes). The data was collected prospectively from labors monitored with ST analysis as an adjunct to conventional intrapartum FHR monitoring. Primary endpoints were the correlation between the magnitude of the T/QRS (Mean + SD, 0.07 + 0.01) given in the ‘STAN event’ and metabolic acidosis and lactacidemia levels in arterial cord blood at delivery, respectively.

The average neonatal cord artery indexes of fetal hypoxia and acidosis in the whole study population were: pH 7.34 ± 0.04, PaO2 29.03 ± 5.29, PaCO2 ± 39.86 ± 6.74, HCO3- 20.20 ± 1.38, EB 4.08 ± 1.81, and lactate 3.91 ± 1.66, respectively.

In addition, magnitude of the T/QRS showed a statistically significant positive correlation with EB (r= 0.17, p < 0.001) and lactate (r= 0.21, p < 0.001). Conversely, magnitude of the T/QRS showed a statistically significant negative correlation with pH (r= 0.07, p < 0.001), PaO2 (r= 0.09, p < 0.05), PaCO2 (r= 0.02, p < 0.05), and HCO3- (r= 0.20, p < 0.001), respectively.

This study correlate the magnitude of the T/QRS events and normal CTG with arterial cord blood values. STAN events in normal then CTG are not associated with clinical metabolic acidosis. However, magnitude of the T/QRS is positively or negatively significantly correlated with all acidosis index of cord blood hemogasanalysis at birth. Thus, an increase in the magnitude of the T/QRS may reflect metabolic adaptation to hypoxia also in fetuses with normal CTG.

COI Disclosure: no conflict of interest
TOPIC: INTRAPARTUM CARE

ID: 214

TITLE: AN ANALYSIS OF THE INFLUENCE OF EPIDURAL ANESTHESIA ON OBSTETRIC RESULTS AND THE MATERNITY SATISFACTION. A PRELIMINARY REPORT.


AFFILIATIONS: Siemiradzki Hospital, Cracow, Poland

CONTENT:
Vaginal delivery under epidural anesthesia allows to reduce pain associated with uterine contraction. The aim of the study is to assess the influence of epidural anesthesia on the course of labor and early puerperium, the general condition of the newborn immediately after birth and the overall satisfaction of the woman giving birth.

Prospective evaluation was made of data on 100 patients who had vaginal delivery under epidural anesthesia in the period from 01.06.2018 – 31.08.2018 in the Delivery Bloc of R. Czerwiakowski Hospital in Cracow; the control group (80 patients) were patients who delivered without anesthesia. An integral part of the study was a questionnaire containing 35 questions regarding the assessment of perinatal care, assessment of the pain level and overall satisfaction with the delivery. Data analyzes were performed using the nonparametric Kruskal Wallis variance analysis test and Mann Whitney odd test of compatibility.

The frequency of delivery by c. section in women under epidural anesthesia vs without: due to the threatening fetal distress 5% (5) vs 5% (4), p <0.05; due to no delivery progress: 9% (9) vs 10% (8) p <0.05. Frequency of use of forceps or V.E.: under epidural 1%(1), without 1.25% (1), p<0.05. Median duration of the first period of delivery with vs without epidural anesthesia: Sh30’ vs Sh10’, 94% (94) of newborns under epidural and 95% (76) without anesthesia were born in good general condition (p <0.05). Discomfort associated with pain during delivery as very large and large indicated 92.5% (74) delivered without epidural, 46% (46) under anesthesia, p <0.05. All patients were qualified for unsubscribe on the second day after delivery.

Epidural anesthesia of vaginal birth: 1. there is no statistically significant effect on the frequency of delivery by caesarean delivery from emergency indications and the percentage of surgical deliveries; 2. has no statistically significant effect on the duration of delivery; 3. does not affect the condition of the newborn after delivery; 4. Significantly improves the comfort of the woman and reduces the fear of childbirth; 5. has no effect on the time of hospitalization after delivery.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 220

TITLE: UNDERSTANDING OF FETAL PHYSIOLOGY FOR OBSTETRIC ANAESTHETISTS – IS IT NECESSARY?

AUTHORS: S Chaudhry; M Jayabalan; S Sukumaran

AFFILIATIONS: South Warwickshire NHS Foundation Trust

CONTENT:
Understanding the fetal physiology in interpreting the CTG (Cardiotocograph) is vital in terms of not only reducing the hypoxic brain injury in fetus but also to reduce unnecessary caesarean section (CS). Most of the acute fetal hypoxia CS are done under general anaesthesia (GA). Along with the risks it takes the precious moments of childbirth from the parents. A good team work including the anaesthetists in decision making can help us minimise this.

An annual session for the anaesthetists was conducted for the last 3 years with live drill situation on labour ward when time permitted. The understanding of fetal physiology was focused on and various fetal hypoxic situations were discussed with examples from our own unit. These cases were also discussed at the time of handover on labour ward. More emphasis was placed on intrapartum resuscitation using “SPOILT” as a mnemonic adapted from the Association of Anaesthetists of Great Britain and Ireland (AAGBI) website. The use of tocolysis in appropriate situations were discussed and encouraged. Importance of team work, communication and human factors was reiterated. In situations like uterine hyperstimulation this plays a crucial role.

The number of babies born with significant hypoxic brain damage was reduced by more than 90% and the number of emergency caesarean sections were reduced from 30% to 7%. There was a significant reduction in number of caesarean sections done under GA. This definitely improved the psychological aspect from a mother’s perspective.

Involving anaesthetists in decision making and helping them to understand the fetal physiology and intrapartum resuscitation has proved to improve outcomes in both the mother and the baby including the psychological maternal well being.

COI Disclosure: none
TOPIC: INTRAPARTUM CARE

ID: 227

TITLE: VBAC: VARIABLES AFFECTING MATERNAL CHOICE. PROSPECTIVE OBSERVATIONAL STUDY.

AUTHORS: M. Fiorasi 1 ; S. Perego 1; E. Colciago 1; P. Vergani 1; A. Nespoli 1; S. Fumagalli 1

AFFILIATIONS: University of Milano - Bicocca, School of Medicine and Surgery, Monza, Italy

CONTENT:
Vaginal Birth After Caesarean section (VBAC) is a valid and safe option for most of women who had a previous caesarean section. Although VBAC high success rate, the percentage of elective repeat caesarean section (ERCS) continue to increase. The aim of this study was to explore women’s birth choice (VBAC vs ERCS) considering socio-demographic characteristics, previous birth experience, counselling from a health care professional and general informations received during actual pregnancy.

We conducted a cross-sectional study in women who had one or two previous Caesarean sections and no contraindications for a Trial Of Labour After Caesarean section (TOLAC). Information were collected through a questionnaire about previous birth experience, expectations about this pregnancy, family or friends’ opinions and professional counselling received. Socio-demographics variables were collected from clinical records.

Women were divided into two groups based on birth choice. Descriptive analysis was performed by means, standard deviations and percentages. Chi-square and T-test were adopted for the comparison between categorical and continuous variables, respectively.

A total of 76 women were included, among them 48 (63%) chose TOLAC, with 30 experiencing a successful VBAC (60%). Employed women are more likely to choose VBAC (p= 0.005).

Regarding the previous experience women who choose VBAC perceived to have failed during the previous birth (p= 0.004) and had a negative experience of it (p= 0.008). Women who would like a vaginal birth valued it as a relevant experience in their like (p=<0.001), considered that VBAC could facilitate the bonding with their baby (p=0.033) and evaluated a spontaneous birth to be safer for the baby (p= 0.011).

Women’s decision making about birth choice after previous cesarean section is a complex process, involving previous women’s birth experience, expectations on their ability to give birth and the relationship with the baby. In order to have a positive birth experience midwives should provide an appropriate and personal counselling to guide women to make an informed choice.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 236

TITLE: SUPPORT PERSON DURING BIRTH - WOMEN'S VIEW

AUTHORS: E. Urbanová, M. Bašková, A. Šrenkelová

AFFILIATIONS: Institute of Midwifery, Jessenius Faculty in Martin, Comenius University in Bratislava, Slovakia

CONTENT:
The presence of a support person during birth increases the quality of health care, improves birth outcomes and increases women’s satisfaction with birth. The main objective of this study was to ascertain the overall satisfaction of women with the activities performed by a support person during birth. The satisfaction was assessed in the four key areas of support: physical, psychological, emotional and informational.

The study has a cross-sectional design. The sample consisted of 166 women having a support person during birth. A non-standardized questionnaire was used to collect data on women’s satisfaction in the four basic areas of specific activities provided by support persons: physical, psychological, emotional and informational. A satisfaction level with performed activities was analysed.

A woman’s partner was the most frequent support person (156 women; 94%). However, some of the activities were not performed by support persons or the women were not satisfied with their performance, the high level of satisfaction was found in physical, psychological, emotional and informational support (p < 0.01).

The respondents expressed a high level of satisfaction with the activities of the support person. However, the results indicate that the presence of the support persons themselves, mostly a partner, during birth is more important for women than the activities provided by them.

COI Disclosure: None declared.
TOPIC: INTRAPARTUM CARE

ID: 238

TITLE: MASSIVE OBSTETRIC HEMORRHAGE AUDIT

AUTHORS: Sadia Bhatti, Ali Cobb, Ryan Hogan

AFFILIATIONS: Kings College Hospital London, UK

CONTENT:
Obstetric haemorrhage remains the third leading cause of maternal death across the UK and Ireland with an overall mortality rate of 0.49 per 100000 maternities from 2009-2012. All these cases could have had improvements in their care (MBBRAE UK). Primary postpartum haemorrhage (PPH) is the most common form of massive obstetric haemorrhage (MOH). The aim of this audit was to monitor the incidence of reported MOH and evaluate the appropriateness of the care given in line with the local protocol.

All patients with PPH ≥ 1500 mls as recorded on E3 (web based maternity information system) were included - 42. The study period was between October 2015 – December 2015. Notes were available for 35 patients. They were reviewed and data was collected on the predetermined audit proforma. Those patients’ notes which were not available (7) were partially excluded from the study, which means some data was collected from electronic patient record (EPR) where possible but excluded for data that could not be determined from EPR. The data was analysed on Microsoft Excel. Six key areas were analysed – evaluation of risk factors, communication, activation of MOH protocol, management of PPH (ABCDE), arresting the bleeding and postpartum management.

The first three common risk factors identified were operative birth/LSCS (61%), maternal age > 35 (33%) and PET/PIH (30%). 25/41 patients were primigravidae. Most common mode of delivery was SVD (37%). Consultants were present at 47% and they attended when being called at 66%. 34/42 cases required oxytocin infusion and uptake 25/42 cases required other uterotonic. This equates to about two third of cases were due to atonicity. 7 cases had retained placenta and had manual removal of placenta. 13 cases were due to trauma and were sutured. 2 cases needed Rusch balloon insertion. HDU transfer and documentation of MEOWS chart occurred in 54.3% and 48.5% respectively. About half of patients received blood transfusion and 6 patients received FFP.

Most common risk factor for PPH is operative delivery. Code blue policy should be instituted promptly if ongoing bleeding ≥ 1500 mls.

Recommendations were made as follows:
1. The code blue proformas should be stocked in delivery suite rooms to enable documentation to happen contemporaneously.
2. Order only one unit of blood at a time for non-bleeding patients as this reduces risk of adverse reaction.
3. High fidelity simulation training on PPH with Noelle simulator which happened subsequently.

COI Disclosure: None
TOPIC: INTRAPARTUM CARE

ID: 240

TITLE: INTER-OBSERVER AGREEMENT USING FIGO 2015 GUIDELINES FOR INTRAPARTUM FETAL MONITORING IN SECOND STAGE OF LABOUR

AUTHORS: R. Zizzo 1; C. Monzeglio 1; M.G. Alemanno 1; R. Attini 1; C. Carmazzi 1; A. Farina 2; G. Gregori 1; S. Danese 1; G. Menato 1; T. Todros 1.

AFFILIATIONS: 1. Gynecology and Obstetrics, Sant’Anna Hospital, Department of Surgical Sciences, City of Health and Science, University of Torino, Turin, Italy.
2. Gynecology and Obstetrics, DIMEC, University of Bologna, Bologna, Italy.

CONTENT:
In the 2018 the Italian society of Gynecology (SIGO) has decided to adopt the FIGO 2015 classification for assess the CTG in labor.

One of limitations of cardiotocography (CTG) has been attributed to poor inter-observer agreement. Aim of this study was to compare inter-observer agreement for prediction of newborn acidemia, using the FIGO 2015 guidelines.

We conducted a retrospective study at the Obstetrics Department of the Sant’Anna Hospital of Turin between 09/2017 and 03/2018. The inclusion criteria were: term pregnancy, singleton gestation, low and medium risk pregnancy, continuous electronic FHR monitoring, active labor, good quality of the recording, pH value at birth (20 cases with pH ≤ 7.1 and 60 controls with pH > 7.1). The last 60 minutes of the tracings were evaluated, using FIGO 2015 guidelines, by three senior obstetricians, blinded to the clinical data (outcome of delivery, pH value). Agreement between observers was evaluated using Cohen’s kappa coefficient (k).

The inter-observer overall agreement (among three observer) using FIGO 2015 guidelines was 60% for cases with pH ≤ 7.1 (k= 0.53-0.63, p-value < 0.001) and 56.7% for cases with pH > 7.1 (k=0.09-0.36, p-value from 0.403 to < 0.001). In pH ≤ 7.1 cases, there was a concordance of 30%, 15% and 15% for CTG type I, II and III respectively. In pH > 7.1 cases the concordance was instead 55% and 1.7% for CTG type I and II. Again, lack of concordance among the three operators was found for CTG type III in this group.

Our data show a medium inter-observer agreement about the classification of tracings in case of pH ≤ 7.1 using FIGO 2015 guidelines, similar to the one observed in the study performed by Rei in 2016. In pH > 7.1 cases, vast majority of the concordance was attributable only to CTG type I.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 242

TITLE: HYOSCINE BUTYLBROMIDE FOR CERVICAL RIGIDITY IN THE FIRST STAGE OF LABOR: RANDOMIZED CLINICAL TRIAL

AUTHORS: L Tarrats-Velasco 1, I Navarri-Ramos 1, I Paez-Maldonado 2, S Cabrera-Jaime 3

AFFILIATIONS: 1Delivery ward midwife at University Hospital Germans Trias i Pujol, Badalona; Autonomous University of Barcelona
2 Delivery ward midwife at University Hospital Germans Trias i Pujol, Badalona
3 Nursing Research. Institut Català d’Oncologia Badalona. Department of Fundamental, Medical and Surgical Nursing Science, Faculty of Nursing, University of Barcelona, Barcelona, Spain

CONTENT:
In daily practice in the delivery ward, midwives and obstetricians may encounter dilations complicated by cervical rigidity, diagnosed during the periodic vaginal examinations performed during labor. The decision to administer hyoscine butylbromide during dilation is based on its relaxing action on the smooth genital musculature. The aim of the present study is to analyze the effects of HBB in the presence of cervical rigidity that may slow the correct development of the first stage of labor.

Design: randomized, placebo-controlled, double-blind, parallel, pre-post clinical trial.
Methods: Pregnant women delivering at University Hospital Germans Trias i Pujol, in Badalona, Barcelona, between January 2013 and January 2018 were eligible for inclusion. Our calculated sample size target was 70 participants 35 in each group with 95% confidence level, an alfa and beta level of 5% and 80% power. The intervention group received 40 mg of HBB intravenously, while controls received a placebo drip. Primary outcomes were: duration (min) of the first stage of labor, duration (min) from intervention to complete dilation and changes in cervical rigidity. We also collected data on maternal and neonatal variables.

Results: Seventy-one women were included: 47 (66.2%) were nulliparous, and 35 (49.3%) had a spontaneous onset of labor. Fifty-seven (80.3%) women had vaginal deliveries: 37 (52.1%) were eutocic, 7 (9.8%) were assisted by obstetric vacuum, and 13 (18.3%) with forceps/spatulas; 14 (19.7%) were cesarean deliveries following complete dilatation. Mean duration of the first stage of labor was 48.3 minutes shorter in the experimental group compared to the control (p =.287), and mean time from intervention to complete dilatation was 63.3 minutes shorter in the experimental group than control group (p = .084). Study group presented a larger decrease in the persistence of cervical rigidity (p = .194).

The results obtained do not show statistically significant differences that would support the systematic use of HBB in women with cervical rigidity, but the clinical differences between groups may allow consideration of selective use of HBB in cases requiring intervention to ease dilation for reasons such as persistent cervical rigidity.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 264

TITLE: FRIEDMAN’S AND ZHANG’S LABOR CURVES - DIFFERENT CRITERIA, DIFFERENT OUTCOMES?

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AFFILIATIONS: 1 - Serviço de Ginecologia e Obstetrícia, Centro Hospitalar e Universitário São João
2 - Faculdade de Medicina da Universidade do Porto
3 - Center for Health Technology and Services Research (CINTESIS), Faculty of Medicine, University of Porto, Portugal;
4 - Department of Community Medicine, Information and Health Decision Sciences, Faculty of Medicine, University of Porto
5 – i3S Instituto de Inovação e Investigação em Saúde, Universidade do Porto

CONTENT:
Labor management still remains a crucial cornerstone of obstetrical practice. The rising rate of cesarean section (CS) is a matter of concern. Arrested labor (AL) represents 34% of the first cesarean births. By adopting the contemporary Zhang’s labor curves the CS rate is expected to decrease without interfering with maternal/fetal outcomes. Our goal was to evaluate the maternal and fetal/neonatal morbidity in a tertiary perinatal care university hospital comparing Friedman’s and Zhang’s labor curves.

Retrospective cohort study: women with an AL (as defined by Friedman or Zhang) during a period of two years (2015-2016) were selected from an electronic medical record data. Exclusion criteria were: preterm labor, multiple gestation, non-vertex presentation, elective cesarean section and cesarean sections performed in women without active labor. Maternal outcomes (infectious, hemorrhagic, traumatic and thrombotic) and fetal morbidity (hypoxic-ischemic, traumatic, neonatal intensive care admission) were comparatively evaluated between women with arrested labor (in the first or second labor stage) with Friedman and Zhang criteria.

From 4500 partograms 751 cases fulfilled the AL’s criteria in the first or/and second stages: 380 (Zhang’s) and 811 (Friedman’s). 497 (66.1%) women were primiparous, 109 (14.5%) had previous CS, 30 had suspected macrossomia (3.9%) and 150 (20%) were obese. The mode of delivery was: vaginal in 57.7% (38.5% vacuum) and cesarean in 42.3%. The birth weights ranged from 2030g - 5520g (6% > 4000g). In the first stage, women with only Friedman’s AL criteria had less infectious morbidity (6.6%) comparing with women with both Friedman’s and Zhang’s criteria (15.5%) (p=0.003). After adjusting for CS rates, results were no longer significant. Other maternal morbidity and adverse fetal/neonatal outcomes did not differ significantly comparing both labor curves.

In this cohort of high-risk women with AL the labor policy change with adoption of Zhang’s curves allows to extend the time to accomplish AL criteria and achieving a safe vaginal delivery for both the mother and the newborn.

COI Disclosure: no conflict of interest
TOPIC: INTRAPARTUM CARE

ID: 265

TITLE: POST-PARTUM LABIAL ADHESIONS: RISK FACTORS, PREVENTION AND MANAGEMENT.

AUTHORS: S. Belin 1; L. Aerts 2; B. Martinez de Tejada 3; P. Pétiognat 4; J. Abdulcadir 5.

AFFILIATIONS: Gynecology and Obstetrics Department
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CONTENT:
Perineal trauma is the most common complication after vaginal delivery. One possible complication of such trauma is labial adhesion. It can cause important maternal morbidity: pain, body image issues and delayed resumption of sexual activity. High-quality evidence to guide care is lacking.

We report a series of 8 cases of postpartum labial adhesion. Possible risk factors seem to include perineal trauma, especially in cases of complicated perineal and/or vaginal suture, vulvar edema, and factors increasing the hypoestrogenic state of the postpartum period, including breastfeeding and progestative-only contraceptives. All our patients underwent surgical correction, topical estrogen therapy and manual separation of the labia. We also advised pelvic floor therapy and psychosexual counseling, because our patients presented with dyspareunia, in some cases worsened by secondary pelvic floor muscle hypertonicity, and often associated with important psychological and relational distress.

Preventive methods might include closer follow-up in high-risk situations, leading to the possibility of early suture removal, advice for manual separation and/or topical estrogen therapy when necessary. In a teaching hospital, junior residents should also be trained and supervised for complicated sutures.

Perineal trauma is extremely frequent after vaginal delivery. Special attention should be given in situations at high risk of healing complications. Painful labial adhesions can be managed surgically. Multidisciplinary care should be offered.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 276

TITLE: WATER BIRTH AND MATERNAL AND NEONATAL MORBIDITY AT THE HOSPITAL UNIVERSITARIO DE TORREJÓN

AUTHORS: I. Fernández Buhigas 1, M. Brik 1, S. Mateos 1, A. Aguado 1, E. Rivilla 1, B. Santacruz 1, M. Gil 1

AFFILIATIONS: 1. Obstetric department, Hospital de Torrejón de Ardoz, Madrid, Spain

CONTENT:

The water birth, including the second stage of labour in water is an alternative to traditional delivery and is becoming more popular in many countries. In 2006, the Royal College of obstetricians and Gynaecologist and the Royal College of Midwives published a clinical guide with the indications to assist SSW in low risk gestations. The benefits and risks, regarding safety and efficacy are not clear and some studies consider this intervention as an experimental procedure.

The objective of the study was to analyse the neonatal and perinatal outcomes in the SSW vs. the non-water births. This was a retrospective case-control study including 512 women delivering in a period of 31 months (from November 2011 to May 2014). Women were divided in two groups: Cases (128, defined as women who had a water births) and Controls (384 non-water deliveries as controls), that was matched in a ratio 1:3 by parity and vagino-rectal Group B Streptococcus (GBS), as it is known to be associated with perinatal outcome.

Maternal, antenatal and intrapartum characteristics: Both groups were homogeneous for maternal age, ethnicity, parity, IVF and smoking. For delivery data, there was a higher rate of no need for analgesia (44.5% vs. 26.8%, p < 0.001) and a lower rate of episiotomy (0% vs. 11.4%, p < 0.05), in the cases vs. controls. The second-stage period was shorter in the cases vs. controls (49.1 ± 40 vs. 74.5 ± 64 minutes, p < 0.001). PPH rate was higher in the cases vs. controls (6.2% vs. 1.8%, p < 0.05). Management of the third stage of labour was significantly different in the two groups, with spontaneous third stage being more common in the cases vs. controls (87.5% vs. 40.6%, p < 0.001). Finally, there were no significant differences between groups at the need for blood transfusion. Neonatal outcome: NUU admission rate was higher in the controls compared to the cases (3.1% vs. 0%, p < 0.05). In the control group, 12 newborns were admitted in the NNU. Table 5 summarizes the need and duration for oxygen, neonatal diagnosis and duration of admission in NNU. In three cases, there was a suspicion of neonatal sepsis and the neonates needed antibiotics for a week time. No newborn needed admission into the NNU in the cases group. Arterial cord pH, Apagar score ≤ 7 at 5th minute and skin to skin rates were similar in both groups, as well as breastfeeding rate at hospital discharge.

Regression Analysis: In the univariate analysis, Apagar score ≤ 7 at 5th minute, delivering in water and arterial cord pH < 7.15, were predictors for NNU admission. However, in the multivariate analysis, only arterial cord pH at delivery remained as an independent predictor (arterial cord pH > 7.15, OR = 0.105 (CI 95%, 0.033-0.333). In the univariate analysis, predictors for PPH were: maternal weight in the first trimester and water birth. However, in the multivariate analysis only parity and maternal weight were independent predictors for PPH, OR = 3.977 (CI 95%, 1.042 – 15.174), and OR = 1.044 (CI 95%, 1.010 – 1.079), respectively.

In women with low risk for intrapartum complications, water birth is safe option. Water birth was associated with lower episiotomy and NNU admission rates and no serious adverse neonatal outcomes. The explanation for the good neonatal outcomes could be related to the strict selection of the women and the training of the medical staff. Active management of third stage of labour should be strongly recommend. The main limitations are the small sample size and the retrospective case control design.

COI Disclosure: None declared.
Atrioventricular block is defined as a delay or interruption in the transmission of a impulse from the atria to the ventricles due to an anatomical or functional impairment in the conduction system. The conduction can be delayed, intermittent or absent.

The incidence of congenital heart block (CHB) varies between 1 in 15000 to 1 in 22000 live-born infants. Autoimmune CHB due to maternal auto antibodies is responsible for 60 to 90 percent of cases of congenital CHB.

Our patient is a 39 year-old woman, who had a normal delivery in 2012 and four consecutive miscarriages after this. For that reason, she was studied and diagnosed of Antiphospholipid Syndrome and was given acetylsalicylic acid and Enoxaparin treatment.

In the second trimester ultrasound, a fetal AV block was diagnosed so Anti Ro and AntiLa test was investigated and weekly control using ultrasound and fetal echocardiography was established.

The Anti-Ro and Anti-La were positive so we indicate treatment by corticosteroid as soon as we knew it. The weekly ultrasounds showed no significant changes with a ventricle around 56 bpm and an atrial rhythm around 150 bpm.

At the 38+6 week assessment, the frequency of the ventricles was difficult to define and the atrium were around 157 lpm so the terminated the pregnancy was indicated.

The labor was induced in order to achieve an adecuated maternal and fetal monitoring on a highly skilled professional environment to try to get a vaginal delivery.

Internal fetal monitoring was used during the labor but in the last fifteen minutes of the second stage of labor fetal heart beat was monitor with Pinard stethoscope due a technical problem with the internal monitor.

The duration of delivery was 9 hours. The birth weight was 3230 g. Apgar score at minute one: 8 at minute at minute 5: 8. Arterial pH 7.29 (EP-7), venous pH 7.3.

The newborn has remained hemodynamically stable with a heart rate around 50 beats per minute and he is being control by cardiology.

With the technologic advances in ultrasound, prenatal diagnosis of autoimmune CHB has become standard of care in most institutions. The CHB does not condition the obstetric behavior at the time of delivery, except in cases of acute fetal distress, hydrops or congestive heart failure, in which termination by caesarean section would be indicated for this reason we help the woman to have a vaginal delivery.

**COI Disclosure:** None declared
TOPIC: INTRAPARTUM CARE

ID: 282

TITLE: ROLE OF MATERNAL CHARACTERISTICS AND EPIDURAL ANALGESIA ON CAESAREAN SECTION RATE IN GROUPS 1 AND 3 ACCORDING TO ROBSON’S CLASSIFICATION: A COHORT STUDY IN AN ITALIAN UNIVERSITY HOSPITAL SETTING.

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AFFILIATIONS: 1Department of Obstetrics and Gynaecology, Fondazione Policlinico Universitario ‘A. Gemelli’, Catholic University of Sacred Heart, Rome, Italy. 2Department of Anaesthesiology and Intensive Care, Fondazione Policlinico Universitario ‘A. Gemelli’, Catholic University of Sacred Heart, Rome, Italy.

CONTENT:
To investigate the role of maternal characteristics and epidural analgesia (EA) on caesarean section (CS) rates in selected groups by using the Robson 10-Group Classification System (RTGCS).

A cohort study including 12,098 deliveries in periods I (1998-1999) and II (2010-2011) at Department of Obstetrics and Gynaecology, Fondazione Policlinico Universitario ‘A. Gemelli’, Rome, Italy was constructed. The main outcome measure was the rate of CS in groups 1 and 3 of RTGCS.

In group 1, 1,144 (20%) patients were assigned to period I and 1,302 (20.4%) to period II, while in group 3, 1,587 (27.8%) were assigned to period I and 1,502 (23.5%) to period II. CS rates were 16.4% and 23.1% in group 1 and 12.7% and 10.9% in group 3 in periods I and II, respectively. In group 1, significant and independent contributions to CS rate were provided by maternal age (p=0.018; OR 0.95 (95% CI 0.85 to 0.97)), body mass index (BMI) (p=0.022; OR 0.89 (95% CI 0.85 to 0.91)) and EA administration (p=0.037; OR 0.59 (95% CI 0.43 to 0.77)). In group 3, maternal age (p<0.001; OR 0.93 (95% CI 0.89 to 0.96)) and BMI (p=0.023; OR 0.98 (95% CI 0.96 to 0.99)) were found to be significantly associated with CS.

RTGCS is an effective tool for analysing changes in obstetric care, allowing for the recognition of maternal age, BMI and EA administration in the strategic planning for mitigation of CS rates in selected groups.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 288

TITLE: PERINATAL RESULTS IN RELATION TO THE MODE OF PRETERM DELIVERY

AUTHORS: R. Gerychova R.1, P. Janku P., L. Hruban 1, P. Ventruba 1, I. Borek 2

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CONTENT:

Preterm birth is associated with significantly higher neonatal morbidity and mortality. The neonatal immaturity is among other things associated with limited stress tolerance and optimal mode of delivery remains still controversial. The aim of our study was to evaluate our perinatal results of preterm birth in relation to the mode of the delivery.

A single-center retrospective cohort study of 655 singleton preterm birth between 23+0 to 34+0 gestational weeks from 1/2012 – 12/2016 in perinatal care center University Hospital Brno, Czech Republic. We analysed a perinatal morbidity of five subgroups of pregnancies - 23+0-24+6, 25+0-26+6, 27+0-28+6, 29+0-31+6, 32+0-34+0 using a multivariate logistic regression statistical analysis. Study exclusion criteria were intrauterine fetal death, intrauterine growth restriction and fetal congenital anomaly. As an adverse neonatal outcomes were taken perinatal death, birth asphyxia, brain injury or trauma, as an maternal adverse outcomes peripartal hemorrhage and operative complications.

The number of primiparas was same in all groups. Gestational age was not statistically significant for risk of birth asphyxia, the occurrence in all groups was 3,5 - 7,4 % and was independent on the delivery mode.

In the same way as an intracranial hemorrhage (6,7 – 7,8%), neonatal birth trauma (13,5 – 16,8%) occurred most frequently in groups 25+0-26+6 and 27+0-28+6. The frequency of caesarean sections in these groups was 50,7 -53,5% vs 31,5 - 38,4 % in the remaining groups.

Significantly more occurrence of perinatal death was in group 23+0-24+6 (22,6 %) vs in 25+0-34+0 (0 - 2,7 %), but was independent on the delivery mode. Maternal injury was higher in groups 23+0-28+6 (1,2 vs 0,5 %), a blood loss was same in all groups.

In the periviable group 23+0 – 25+6 gestational weeks were neonatal outcome independent of the mode of delivery. The mode of delivery does not affect survival. In these gestational weeks a birth has to be individually consulted and it is important to consider parents’ wishes.

Higher maternal morbidity was seen in the groups 23+0 – 28+6. More prospective data is needed.

COI Disclosure: None declared
Objective of this study is analyzing maternal and neonatal outcomes of midwife-led labor in low-risk women at term versus labor deviating from low-risk only for epidural anesthesia in a University Tertiary Maternity Hospital in Milan between January 2017 and May 2018 (36.4% of all deliveries).

Retrospective observational cohort evaluation of 1435 singleton low-risk pregnancies in spontaneous term labor, managed according to a midwife-led labor protocol. This low-risk cohort was subdivided in three groups: 556 women that remained low-risk at delivery (LR, 39%), 347 women undergoing epidural analgesia (EA, 24%) and 532 women deviating from low risk for meconium stained fluid, augmentation with oxytocin or FHR abnormalities (HR, 37%).

Primary outcomes were mode of delivery (cesarean section -CS- or vacuum extraction -VE-), severe postpartum hemorrhage (PPH, blood loss >1000 cc), neonatal pH and Apgar score. Statistical analysis was performed using Chi Square test.

The comparison between LR and EA groups showed similar rates of severe PPH (5/556=0.9% in LR vs 6/347=1.7% in EA) and neonatal pH <7.10 (5/556=0.9% in LR vs 6/347=1.7% in EA). Differently, worse outcomes were found in HR versus EA and LR regarding severe PPH (38/532=7.1%, p<0.005) and pH < 7.10 (23/532=4.3%, p>0.05).

Moreover, in the HR group CS was performed in 43/532 (8.1%) and VE in 110/532 women (20.7%). This was higher than in the EA group, with 10/347 (2.9%) and 28/347 (8.1%) for CS and VE, respectively.

In singleton low-risk pregnancies in spontaneous labor only 556/1435 women remained at low risk after labor. 347 (39%) women who deviated only for epidural had maternal and neonatal outcomes similar to the LR group. Operative deliveries, CS, severe PPH and neonatal pH<7.10 rates were lower than in the women reclassified as high risk, as if epidural alone could not influence labor and delivery outcomes. Further studies with a bigger population are needed to confirm these findings.

COI Disclosure: none declared
TOPIC: INTRAPARTUM CARE

ID: 294

TITLE: CRITICAL ANALYSIS OF FIGO 2015 CTG GUIDELINES

AUTHORS: B. Montersino 1, R. Attini 1, R. Zizzo 1, C. Monzeglio 1, M.G. Alemanno 1, C.M. Carmazzi 1, S. Danese 1, G. Gregori 1, G. Menato 1, T. Todros 1

AFFILIATIONS: Gynecology and Obstetrics, Department of Surgical Sciences, City of Health and Science, University of Torino, Turin, Italy.

CONTENT:
In 2018 the Italian Society of gynecology (SIGO) has decided to adopt the FIGO classification for assessing the CTG in labor. The new FIGO classification is more restrictive in the definition of pathological CTG than the previous one (1987)(1,2). For example, variable decelerations lasting > 3 minutes define a pathological CTG, while in FIGO 1987 they have to last > 1 min. Aim of this study is to analyze the traces classified as type 1 or 2 (according to FIGO 2015) of newborns with a pH < 7.10.

We conducted a retrospective study at the Obstetrics Department of the Sant’Anna Hospital of Turin between 09/2017 and 03/2018. The inclusion criteria were: term pregnancy, singleton gestation, low and medium risk pregnancy, continuous electronic FHR monitoring, active labor, good quality of the recording, pH value at birth < 7.1. Cases with signs of infection at birth were excluded from the study. In all cases an external FHR monitoring was used. The last 60 minutes of the tracings were evaluated, using SIGO 2018 guidelines, by three senior obstetricians, blinded to the clinical data (outcome of delivery, pH value). We have reviewed all cases where all the operators have classified the CTG as type 1 or 2.

40% (8/20) of CTGs of neonates with pH < 7.1 were classified as type 1 or 2. Of these, 3 cases (15%) were classified by all three obstetricians as type 1. Reviewing the traces, one case is a trace correctly classified as type 1. Of the remaining seven traces, in four cases (57%) there was a change in the baseline within the normal range in the absence of pathological decelerations according with the FIGO 2015 guidelines. It’s important to report that none of the fetal traces with pH < 7.1 has been classified by all operators as type 3.

This is a small study whose results need to be verified on larger studies. With this limit, we can assume that the FIGO 2015 classification requires a careful evaluation of the clinical context and a good knowledge of the pathophysiology of the fetal response to hypoxia in order to contextualize the reading of the CTG and avoid the underestimation of the trace with consequent birth of a fetus with low pH.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 299

TITLE: OBSTETRIC ANAL SPHINCTER INJURY (OASI) CARE BUNDLE-OUR EXPERIENCE

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CONTENT:
The rate of OASI has tripled over the last decade, overall the incidence in UK is 2.9%.
The OASI has 4 key elements
  - Information to the patient
  - When indicated, mediolateral episiotomy (MLE) at 60-degree angle
  - Manual perineal protection (MPP) for all births
  - Perineum examined (PR & PV).

OASI has been piloted in 11 units in UK. Our unit introduced it in Jan 2017. We have collected data for 12 months to evaluate our service.

We identified 72 patients (Jan 2017-18). Data was collected retrospectively. We compared it with the standards in the OASI care bundle.

41 patients sustained OASI with normal vaginal delivery and 31 during instrumental delivery. All patients received information at booking. Patients who had sustained OASI with instrumental delivery had MLE, 1 who had normal delivery had MLE. OASI related to normal delivery rate has significantly fallen (pre-pilot rate of 2.2%, target-2%), however current OASI rate is 1.5%. OASI related instrumental delivery rate has increased. On further analysis, majority (87%) in their first pregnancy. Forceps use of choice in 27 (87%) deliveries. Kiellands forceps was used for one of the deliveries. 2 had double instrumental. 100% MPP applied during instrumental deliveries. Only 5 babies had birth weight of >4kgs. 3 shoulder dystocias - 31 patients.

In our study we found that our OASI rate is 1.85% which is much lower than the national rate of 2.9%. However we are aware of the increased rate of OASI with Forceps delivery. We are now providing training one to one session to trainees to encourage use of ventouse and reinforcing the elements of OASI. We are now providing training one to one session to trainees to encourage use of ventouse and reinforcing the elements of OASI.

Majority OASI associated with instrumental deliveries senior trainees.

COI Disclosure: None Declared
TOPIC: INTRAPARTUM CARE

ID: 300

TITLE: EVITABILITY OF SEVERE NEONATAL ASPHYXIA AT BIRTH: A RETROSPECTIVE STUDY ON 19 640 DELIVERIES IN A LEVEL 3, REFERRAL DELIVERY UNIT.

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CONTENT:
Despite the important advances in perinatal care in the past decades, asphyxia remains a severe condition leading to significant mortality and morbidity. We aimed to analyse the obstetrical conditions leading to severe neonatal asphyxia at birth and to precise the sentinel event that could have been responsible of this condition. The evitability of this event has finally been evaluated to better identify the potential improvement targets in future birth practice.

The design of the study was retrospective. Between January 2009 and December 2016, all deliveries with gestational age ≥ 26 weeks of gestation and with the presence of severe metabolic acidosis (pH < 7.05 and base deficit ≥ 12 mmol/L) at birth or with perinatal death were studied. For each case, the obstetrical files were reviewed independently by two experts and maternal, foetal and delivery parameters analysed. In all cases, per-partum cardiotocographic recordings were reviewed. The presence of a sentinel event (i.e., abruptio, cord prolapse or prolonged compression, infection, uterine rupture, maternal hypotension, excessive uterine activity, non-recognition of an abnormal CTG...) was researched and its evitability was assessed.

Among the 19 640 deliveries that occurred during the study period, 147 neonates had a pH < 7.05 and a base deficit ≥ 12 mmol/L. A sentinel event could be identified in 97% of the cases. In 45% of the cases neonatal asphyxia has been classified as evitable by the two experts: 19% were related to maternal hypotension, 81% were related to non-recognition of pathologic CTG or delays in reactivity of the medical team. The rate of metabolic acidosis gradually decreased over the years from 0.46% in 2009 to 0.36% in 2016. The rate of caesarean section also decreased from 20% in 2009 to 18.6% in 2016.

Half of the situations that led to metabolic acidosis could have been avoided or limited. It is essential, given our results, to have regular training and rigorous practice in the analysis and interpretation of the fetal heart rate. With respect to neonatal acidosis rate and caesarean section rate, it does not appear that decreasing the caesarean section rate increased the rate of neonatal acidosis.

COI Disclosure: None
TOPIC: INTRAPARTUM CARE

ID: 302

TITLE: INEQUALITIES IN ACCESS AND OUTCOMES OF CHILDBIRTH: THE ROLE OF NATIONALITY AND POSSIBLE RESPONSES

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AFFILIATIONS: 1 UNIVERSITA’ TORINO
2 scadu EPIDEMIOLOGIA ASL TO3

CONTENT:

The number of migrant women of childbearing age is growing and specific needs of maternal-infant health must be addressed. The study focused on the role of citizenship in the access to services for pregnancy and birth, in order to analyse the correlation between adverse birth outcomes and maternal citizenship, taking into account inequalities in the care pathway.

A retrospective observational study was conducted on Italian and foreign women, with single pregnancy, who gave birth at the hospital Sant’Anna in Turin, between 1 January 2015 and 31 December 2016; the sample of women was limited to the 4 most represented nationalities: Italy, Romania, Morocco and Nigeria (11723 women out of 13274). The source of the data is the regional information system of delivery certificates (CEDAP). The study variables are: maternal citizenship, timing of first prenatal visit, course of pregnancy, gestational age, birth weight for gestational age, need for resuscitation of the newborn baby.

Among women who gave birth in Piedmont, the percentage of those born in countries other than Italy is increasing: it was 22.8% in 2006 and 30.5% in 2016. The most represented countries are Romania, Morocco, Albania and China. Differences in the care pathway and in the outcomes (EG < 37 weeks or ≥ 41, SGA or LGA and/or the need for resuscitation of the newborn) were measured according to maternal country of origin. The percentages of women with a pathological course of pregnancy is greater among Africans than among Europeans. Among women who have had a negative birth outcome, there is a significant difference between European and African mothers with regard to timing of the first prenatal visit, as also reported in the literature. It is therefore necessary to offer “low-threshold” structures in which cultural mediators operate.

Women with negative results for at least 1 out of the 3 factors considered are 3874. Preterm delivery is more frequent in >35 years, less educated and foreigner women: there are significant differences across nationality, between Europeans and Africans and between Moroccans and Nigerians; differences are not significant between Italians and Romanians. There are more post-term deliveries among Moroccan women, while Africans and Romanians have average percentages of LGA infants about twice as compared to Italians. Need for resuscitation of newborns shows significant differences across nationality and between Europeans and Africans, and not significant differences between Italian and Romanian and between Moroccan and Nigerian women.

There are differences in perinatal outcomes between European and African mothers, but not between Italians and Romanians (apart from birth weight for gestational age); between Moroccan and Nigerian women, the only non-significant difference is for gestational age. These inequalities are related to more recent migratory flows: an appropriate approach towards migrant women must provide high-impact relational interventions to account for socio-sanitary, cultural, linguistic and religious diversity.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 304

TITLE: CHARACTERISTICS OF VENTOUSE FAILURES AT NORWAY'S LARGEST DELIVERY UNIT

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CONTENT:
Reasons for ventouse failures include misinterpretation of high station on vaginal exam, inaccurately positioned cup and induction of labour. Internationally reported failure rates have a wide range from 2.3% - 27%. Our aim was to assess the rate of ventouse failures, to describe the characteristics of failures and to identify intrapartum risk factors for those failures at Oslo University Hospital (OUH), Ullevål, one of the largest delivery units in Scandinavia, with circa 7100 births annually.

All ventouse deliveries over a one-year period were recorded prospectively. The operators were asked to fill out a pro forma directly after a ventouse delivery or a trial of such. Pelvic station and position of the head, cup placement and moulding were recorded. Further, cup size and change of cup size, number of cup repositioning and/or detachment, number of pulls by operators, time for start and stop of ventouse delivery, and final delivery mode were recorded. Birth attendants aimed at taking photographs of the newborns chignon. Medical charts of all ventouse deliveries were reviewed. All women assigned to deliver at OUH Ullevål received a letter of information and had the possibility to recline photography of their newborns chignon.

During the observational period 892 ventouse deliveries were recorded. 83% of the women were nulliparous. Of the 836 (93.7%) ventouse deliveries succeeded. Ventouse failure occurred in 56 cases (6.3%), resulting in 41 acute cesarean sections (CS) and 15 forceps deliveries as the final delivery mode. In only 1 of the 41 cases resolved by CS, the pelvic station was below +2. In 51% of ventouse failures, the position of the head was not assessed or documented. Altogether, 13 cup detachments were recorded in the 41 cases resulting in cesarean section and in 65% of these cesareans, a maximum of 3 pulls was performed by the first operator. Induction of labour was performed in 15 of the ventouse failures resulting in cesarean section.

The prospectively recorded rate of ventouse failures at our tertiary center was at the lower range of international reports. Risk factors include high pelvic station of the head, and lacking assessment of the position of the fetal head, likely to increase the risk of inaccurately positioning of the ventouse. However, ventouse failures comprise also cases in which “failure” was anticipated, reflected by a relatively low number of cup detachments and pulls prior to change of delivery mode.

COI Disclosure: None declared.
The only randomized clinical trial (RCT) regarding optimal birth timing of twins, showed that deliveries at 37 0/6 weeks of gestation balance the risk of complications from being born too early against the complications of stillbirth from remaining undelivered for an extra week. However, this study did not differentiate for corionicity. The aim of our study is to compare neonatal outcomes in dichorionic twin pregnancies giving birth at 37 0/6 weeks with literature data of twins born at 38 0/6 weeks.

We examined all dichorionic twin pregnancies followed from a specialized equipe and delivered at S. Anna hospital in Turin from January 2012 to December 2017. The following neonatal outcomes were assessed: fetal death, admission to neonatal intensive care unit (NICU), respiratory distress syndrome (RDS), jaundice and neonatal death. Exclusion criteria included monocorionicity, aneuploidy, fetal congenital anomalies, co-twin death and missing/incomplete data. We compared our data with recent studies in literature on the optimal timing of birth in twin pregnancies, examining the same outcomes in uncomplicated dichorionic twin pregnancies delivered from 38 0/6 weeks of gestation on.

A total of 429 women with uncomplicated dichorionic twin pregnancies were enrolled. Out of them, 310 (72%) gave birth before 37 weeks and 119 (28%) delivered at 37 0/6 weeks, as recommended by our internal protocol. Neonatal outcomes of twins delivered at 37 0/6 weeks included 12 (10%) cases of RDS, 12 (10%) cases of NICU admission and 15 (13%) cases of jaundice, in line with literature’s data. No fetal or neonatal deaths occurred. There are only few studies on twins born at 38 0/6 weeks; rates of RDS ranged between 2 and 7%, NICU admissions ranged between 8 and 10%, jaundice ranged between 3 and 4%.

According to Cheong-See 2016’s review, stillbirths risk triples from 37 0/6 to 38 0/6 weeks of gestation, while neonatal death risk is reduced by 1/3. These considerations are limited by lack of data on antepartum fetal monitoring, mode of delivery, and level of neonatal care. Our results suggest that delivery at 37 0/6 w slightly increases the rate of RDS, admission to NICU and jaundice. Planned delivery at 37 0/6 weeks may be a reasonable trade-off between fetal death and neonatal morbidity.

COI Disclosure: none declared
TOPIC: INTRAPARTUM CARE

ID: 309

TITLE: MATERNAL INTRAPARTUM FEVER MANAGEMENT

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CONTENT:
Despite most causes of intrapartum fever (IF) are non-infectious, it often prompts the diagnosis of chorioamnionitis, or ‘triple I’ (intra-amniotic infection or inflammation). The poor specificity of clinical signs and the lack of effective biomarkers to identify infectious etiology, result in the overuse of antibiotics, with consequences on both the mother and the newborn. The aim of our study is to investigate the management of IF in a cohort of pregnant women.

A retrospective cohort study was performed from January 2012 to December 2016. It included women between 37 and 42 gestational weeks who developed auricular body temperature ≥38 °C during labour. The diagnosis of clinical chorioamnionitis was made when IF was accompanied by at least one of the following: fetal tachycardia >160 beats per minute (bpm), maternal tachycardia >100 bpm, maternal leukocytosis (white blood cell (WBC) >15,000 cells/ml), uterine tenderness, or foul-smelling vaginal discharge. Antibiotic prophylaxes with ampicillin was started at admission for rupture of membrane and in patient with positive GBS swab.

38 women were included: 31 (82%) nulliparous, 9 (24%) with a GBS positive swab, 22 (58%) underwent labor induction, 26 (68%) received epidural analgesia, 14 (37%) women had a spontaneous rupture of membranes. 17 patients (45%) developed fetal tachycardia, 24 (63%) leukocytosis. 36 (95%) women and 27 newborns (71%) received an antibiotic therapy (all 36 women amoxicillin/clavulanic acid, 4 also gentamicin, all 27 newborns ampicillin, 21 also gentamicin). In 18 cases (47%) an infective etiology was demonstrated according to maternal (11), neonatal (7), or both (3) cultures. In only 6 cases (16%) complete maternal cultures were performed (blood, uterine/placental, urine). The prevalence of histological chorioamnionitis was 34% (13).

IF should not automatically lead to a diagnosis of infection and all women should be screened for infection through blood cultures, urine-culture, and uterine/placental swab. Results should be promptly shared with neonatologist to avoid newborn overtreatment. The appropriate timing and choice of antibiotic treatment of febrile patients still remain uncertain and challenging and should involve obstetricians, neonatologists, and infectiologists.

COI Disclosure: None declared
Epidural analgesia during delivery, increases the second stage of labor timing, and in some cases reduces the number of vaginal delivery without instrumental.

It's described in the literature, that the position of women during this process can act against one of the adverse effects of epidural, the timing of second stage.

This review consists in carrying out a systematic bibliographic search that gives us information about studies based on the effects of the epidural on the increase of the duration of the second part of the birth and possible maternal positions to counteract this effect.

The search for articles was made from the databases of RIMA, Pubmed, Cochrane.

The literature describes different variables to be assessed: Nulliparity, oxytocin augmentation, epidural use, birthweight, labor induction, lower body mass index, and higher maternal age were found to be significantly associated with prolongation of the second stage. Epidural use was associated with an additional minutes for nulliparas.

About positions, upright positions in the second stage were associated with a non-significant reduction in the risk of both instrumental delivery and cesarean section. The studies reported a statistically significant reduction in labor duration associated with upright positions.

Investigators found suggest a significant prolongation of the second stage in women with the use of epidural analgesia.

Talking about maternal positions, the literature says that there aren’t sufficient data to evaluate a significant benefit reducing the timing in the second stage of labor. However, is not describe a decrease in the number of instrument delivery and cesarean sections in women who underwent changes in position.

COI Disclosure: It's important to reduce costs and improve outcomes, is we decrease cesarean section and instrumental delivery.
CONTENT:
There are no clear recommendations regarding management of fetal macrosomia. There is a need to update guidance for healthcare professionals managing such high-risk pregnancies in view of recent evidence. The objective of our study was to estimate the obstetric and neonatal complications in pregnancies with macrosomia based on a systematic review and meta-analysis of literature with an aim to accurately estimate the evidence-based risk of such complications.

An electronic search of MEDLINE, EMBASE, CINHAL and The Cochrane Library was carried out utilising combinations of key words and MeSH terms. We selected studies which reported data in macrosomia as well as non-macrosomia groups for complications including caesarean section (CS), post-partum haemorrhage (PPH), obstetric anal sphincter injury (OASIS), shoulder dystocia (SD) and fractures. Macrosomia was defined as birth weight of > 4,000 g. The quality of studies was assessed using Newcastle-Ottawa scale and quality of systematic review and meta-analysis was validated with PRISMA. Pooled summary statistics were estimated using random effects model. Heterogeneity between studies was estimated using Cochrane’s Q and I² statistic.

The search identified 3,089 citations; we selected 16 studies for inclusion, including 5 population and 9 retrospective cohort studies. There was evidence of heterogeneity in the studies with regard to sample size, prevalence of macrosomia and reported complications. The risk of maternal complications was increased in the macrosomia group compared to the non-macrosomia group; the weighted pooled summary odds ratio (OR) for CS, PPH and OASIS was 1.82 (95% confidence interval [CI]: 1.68-1.98), 1.98 (95%CI: 1.69-2.30), and 1.82 (95%CI: 1.62-2.03), respectively. Similarly, the pooled OR for neonatal complications such as SD, OBPI and fractures was 8.61 (95%CI: 6.35-11.66), 11.03 (95%CI: 7.06-17.23) and 6.43 (95%CI: 3.67-11.28), respectively.

Macrosomia is associated with significantly increased risks of adverse maternal and neonatal outcomes; the estimates of these risks are higher for the neonate than for the mother. This study provides accurate evidence-based estimates of complications of macromomia that can be used in counselling women to enable them to make informed choices about delivery.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 326

TITLE: HEALTH PROMOTING SETTINGS FOR CHILDBIRTH

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CONTENT:
Many studies highlight how health is influenced by the settings in which people live, work, and receive health care. In particular, the setting in which childbirth takes place is highly influential. The physiological processes of women’s labour and birth are enhanced in health promoting ("salutogenic") environments. Settings can also make a difference in the way maternity staff practice. This paper focuses on how positive examples of Italian birthplaces include principles of healthy settings.

The ‘Margherita’ Birth Centre in Florence and the Maternity Home ‘Il Nido’ in Bologna were purposively selected as cases where the physical-environmental setting seemed to reflect an embedded model of care that promotes health in the context of childbirth. Narrative accounts concerning the ideas underpinning the project design and feedback in the selected birthplaces were collected from lead professional and direct inspections of the service were then performed by members of the research team in order to deepen the insights emerging through the professionals’ narratives and elicit the key salutogenic components of the physical layout. Comparisons between cases with a standard hospital labour ward layout were performed.

The description of the settings and the rationale behind their constitution (both spatial and organisational) suggested the way these factors seem to promote both health and wellbeing. A table was created in order to illuminate components that could optimise the health of childbearing women, their birth companions, and attending staff. Cross-case similarities emerged. The physical characteristics mostly related to health promoting settings were a result of collaborative design decisions with stakeholders and users, and the resulting local intention to maximise safe physiological birth, psychosocial wellbeing, facilitate movement and relaxation, prioritise space for privacy, intimacy, and favour human contact and relationships.

This article explores how virtuous examples of existing birth centres incorporate principles of healthy settings in their environment. The challenge is understanding which elements of a birth setting are responsible for the improved outcomes, and how these could be translated to other settings. The key elements identified have the potential to inform further investigations for the design or renovation of birthplaces in order to optimise the salutogenic component of any setting in any country.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CARE

ID: 329

TITLE: UTILITY OF FETAL BIOMETRY AND DOPPLER PARAMETERS FOR PREDICTION OF ADVERSE PERINATAL OUTCOMES IN LOW-RISK WOMEN AT 36-41 GESTATIONAL WEEKS

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*opinions expressed in this article do not involve the institution to which the author belongs

CONTENT:

More than 63% cases of neonatal asphyxia occur in women defined at low obstetric risk. Doppler ultrasound is a valid tool for recognizing fetal hypoxaemia situations; it allows to analyze cardiocirculatory flow in maternal and fetal districts. The aim of this study is comparing the predictive value for unfavorable intrapartum outcomes of biometric and doppler ultrasound parameters alone and in association in pregnancies at obstetric low risk between 36 and 41 gestational weeks.

This was a prospective cohort study of low-risk singleton pregnancies undergoing ultrasound check at 36-41 weeks. At study inclusion were measured estimated fetal weight (EFW) and fetoplacental Doppler variables: pulsatility index (PI) of uterine arteries (UtA-PI), umbilical artery (UA-PI), middle cerebral artery (MCA-PI), ductus venosus (DV-PI) and cerebroplacental ratio (CPR). SGA was defined as a birth weight <10th centile. Adverse perinatal outcomes included emergency Cesarean section for non-reassuring fetal status (CS-IFC) and composite neonatal morbidity (Apgar score 12 mEq/L or admission at neonatal intensive care unit for the first 72 hours after birth) (CNM).

A total of 103 pregnancies were included. Of these, 8 (7.7%) were classified as SGA and an overall rate of CS-IFC of 8 (7.8%) and CNM of 15 (14.6%). As opposed to EFW, each Doppler variables resulted not significantly associated with SGA. For CS-IFC, both UtA-PI and DV-PI were significantly and independently associated. At a fixed 10% false-positive rate (FPR), the detection rate (DT) of CS-IFC by EFW, UtA-PI, CPR, DVPI and by a combination of Doppler variables (UtA-PI and CPR) and EFW was 12.5%, 25.0%, 25.0%, 37.5%, 25.0% and 12.5%, respectively. At a fixed 10% FPR, the DT of CNM by EFW, UtA-PI, CPR, DVPI and by a combination of UtA-PI and CPR with EFW was 6.67%, 20.0%, 22.67%, 33.33%, 6.67% and 20.0%, respectively.

Fetal biometry, valid to identify SGA fetuses, not improve the prediction CS-IFC and CNM in a cohort of low-risk pregnancies at 36-41 gestational weeks. Combining EFW with Doppler variables, in particular DVPI, can improve predictive value for adverse perinatal outcomes, although not markedly. Further investigation could identify more strategies of antepartum fetal screening and surveillance.

COI Disclosure: none declared
The aim of the present study was to evaluate the impact of maternal characteristics and obstetrical management on Caesarean Delivery (CS) in labor based on the new classification proposed by Robson et al. (M. Robson, M. Murphy, F. Byrne; Quality assurance: The 10-Group Classification System (Robson classification), induction of labor, and cesarean delivery; International Journal of Gynecology and Obstetrics 131 (2015) S23–S27).

This was a retrospective study including all pregnancies in labor who delivered between January and October 2018 at the University Hospital of Parma. Women were divided into 3 groups according to Robson classification: Group 1 (CS performed for fetal reason without oxytocin) Group 2 (CS performed for Inefficient Uterine Action) and Group 3 (CS performed in women with Efficient Uterine Action but persistent fetal malposition/obstructed labor). The following variables were collected and analysed among the three groups: maternal age >35, pre-pregnant BMI >30, nulliparity, preterm delivery (<37 weeks of gestation), induction of labor and epidural analgesia (EA).

Overall, 165 women underwent CS during labor: 23% of women in Group 1, 60% in Group 2 and 17% in Group 3. The following variables were significantly different among the 3 Groups: rate of nulliparity (50% vs 34.3% vs 17.9%; p=0.025), rate of induced deliveries (65.8% vs 39.4% vs 57.1%; p=0.013) and rate of EA (65.8% vs 44.4% vs 25.0%; p=0.004). Incidence of nulliparity was significantly higher in Group 1 compared to Group 3 (p=0.0007); incidence of induction of labor was higher in Group 1 compared to group 2 (p=0.005) while incidence of EA was higher in Group 1 compared to the other Groups (p=0.002 and p=0.001, respectively).

Incidence of nulliparity, induced labor and epidural analgesia is higher in women who underwent CS during labor for fetal reason without oxytocin while CS performed in group 2 and 3 were not associated to the variables included in the present analysis.

COI Disclosure: None declared
**TOPIC:** INTRAPARTUM CARE

**ID:** 336

**TITLE:** MATERNAL CHARACTERISTICS AND LABOR MANAGEMENT: EFFECTS ON MODE OF DELIVERY

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**CONTENT:**

The aim of the present study was to evaluate the impact of maternal/pregnancy characteristics and management during labor on the mode of delivery.

This was a retrospective study including all singleton pregnancies who delivered between January and October 2018 at the University Hospital of Parma. Women were divided into three groups according to the mode of delivery: spontaneous vaginal delivery (VD); operative VD (OVD) and emergency caesarean section (CS). The following data were retrieved from medical records and compared among the three groups: maternal age, pre-pregnancy BMI, weight gain, parity, IVF pregnancy, induction of labor, neonatal weight, gestational age at delivery, augmentation with oxytocin, amniotomy and epidural analgesia.

Of 1898 women, 79.9% had a VD, 7.7% had OVD and 12.4% underwent an emergency CS. Maternal age >= 40 (6.9% vs 11.6% vs 10.7%; p 0.02), pre-pregnancy BMI >= 30 (9.5% vs 6.3% vs 15.9%; p 0.003), IVF (1.5% vs 6.2% vs 8.5%; p <0.001), nulliparity (49.5% vs 78% vs 56.8%; p <0.001), augmentation (12.9% vs 29.5% vs 13.9%; p < 0.001), analgesia (29.3% vs 50% vs 37.6%; p =40 [RR 1.7 95%CI 1.0-3.1 p 0.04]), IVF (RR 4.3 95% CI 1.8-10.0; p 0.002), analgesia (RR 3.63 95%CI 2.4-5.45; p <0.001), and delivery of SGA increased the risk of emergency CS [RR 1.9 p 0.003 and RR 2.41 p <0.0001] but not the risk of OVD; augmentation with oxytocin was associated with an increased risk of OVD (RR 2.86; 95% CI 1.94-4.21 p <0.001) without affecting the risk of emergency CS.

Maternal age >= 40 years, nulliparity, IVF and epidural analgesia are associated with a higher risk of both OVD and emergency CS while augmentation with oxytocin was associated with a higher incidence of OVD without increasing emergency CS rates.

**COI Disclosure:** None declared
FACTORS INFLUENCING THE US-PROJECTION OF FETAL HEART AREA ON MATERNAL ABDOMEN. A PROSPECTIVE STUDY

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Actual US-CTG are based on only one Doppler sensor requiring that fetal heart to be located within the US beam. Doppler US recording quality highly depends on the correct positioning of the US transducer on the maternal abdomen. New technological solutions with multiple sensors are in progress. Their design will however need to integrate the mapping of fetal heart projections on maternal abdomen. The aim of this study was to describe the position in fetal heart projection on maternal abdomen.

During a 9 months period (January 2017 – September 2017), all patients reaching our prenatal clinic with an indication of CTG were proposed to participate the study. Immediately before CTG recording, an ultrasound scan was performed, and the fetal presentation was noted as well as the fetal spine position. Fetal heart projection on the maternal abdomen was defined as the point on maternal abdomen with the minimal depth between AV-valves and the maternal skin. The location of this point on maternal abdomen was mapped by measuring the distance (height and laterality) to maternal umbilic. Maternal biometric (height, weight) and pregnancy characteristics (parity, gestational age) were also recorded.

During the study period 769 patients were included. Among these, 5.8% (n=45) were twins and among singleton, 9.2% (=67) were in breech, and 1.2% (=9) in transverse presentation. In 93% of patients, US-projection of the fetal heart was within a complex elliptic area (butterfly like) shifted by 2.53cm on the left maternal side. The distribution was highly dependent from fetal presentation, fetal spine position and maternal BMI.

The results of our study enabled us to define an area of US-projection of fetal heart with a precise delimitation of this area to help the design the size of future flexible sensor matrix. This projection could also help learning doctors and midwives to more accurately and without delay place the Doppler sensor in actual US-CTG.

COI Disclosure: None
The role of epidural analgesia in increasing the incidence of operative deliveries is controversial. The objective of this paper is to evaluate the potential association between Epidural Analgesia (EA) and operative vaginal deliveries (OVD) and caesarean sections (CS), according to Groups 1, 2A, 3 and 4A of Robson Ten Group Classification System (TGCS), in Obstetrics and Gynaecology Unit in Parma, Italy.

We collected data of all women who delivered in our Unit from January to October 2018 and analysed incidence of OVD and CS in Groups 1, 2A, 3 and 4A of TGCS. We assessed OVD and CS among patients who received EA during labour and compared among those who did not receive EA, for each of the aforementioned Groups.

Epidural Analgesia is associated with a significantly higher OVD rate only in Group 1 (nulliparous singleton cephalic term women in spontaneous labour) (p=0.02). Regarding caesarean sections, Epidural Analgesia is significantly associated with higher CS rate for group 1 and 2A (p = 0.0060 and p= 0.0069 respectively).

Our data have shown that operative vaginal deliveries and caesarean sections are higher in women receiving epidural analgesia during labour, with significant association particularly for nulliparous women at term, labouring spontaneously. Further researches will evaluate the differences between receiving Epidural Analgesia and not receiving Epidural Analgesia Groups in term of clinical characteristics and labour management.

COI Disclosure: None declared
The purpose of this study was to determine the fetal heart rate (FHR) changes and neonatal outcomes that occur in fetuses whose mothers have diagnosed adherent placenta previa (aPP). We surveyed all 798 non-stress test (NST) data acquired using a computerized FHR analysis system between 2016 and 2017. 156 patients with aPP were examined and compared to 156 controls with uncomplicated normal pregnancies. All were evaluated at 27-42 weeks of gestation. Neonatal outcomes and FHR parameters included baseline FHR, variability as amplitude (AMP) and mean minute range (MMR), number of accelerations and decelerations in 20 minutes were compared and analyzed. We calculated approximate entropy (ApEn) to quantify irregularity and the chaotic dynamics of each FHR time series.

Neonatal outcomes including weeks of delivery, neonatal height, weight, one-minute Apgar score, and five-minute Apgar score were significantly lower in the aPP group (all, P<0.05). The aPP group had higher baseline heart rate, parameters associated with FHR reactivity (AMP, MMR), and number of accelerations and decelerations than the controls (all, P<0.05). The ApEn was significantly lower than the controls (0.83±0.10 vs. 0.88±0.08).

Fetuses of mothers with aPP showed significant higher rates of baseline fetal heart tracing, reactive FHR patterns and worse neonatal outcomes. These fetuses may respond to acute bleeding and accelerate the central nervous system maturation for overcoming the stressful environment. However, the complexity of the fetal biological response is presumed to progress to a less favorable one.

COI Disclosure: "None declared"
Fetal extraction with intact membranes or "caul" preterm fetuses reduces complications associated with prematurity. Less handling in the extraction seems to cause less obstetric trauma, thus maintaining the mechanical protection of the amniotic fluid. Studies also indicate an improvement in Apgar score, reduced need for resuscitative measures and reduced hospital stay. The technique can be hindered by the amniotic fluid volume, an index of low Bishop and a high birth weight.

To perform the hysterectomy surgical scalpel is used with continuous aspiration to correctly display the uterine opening. After the same, the membrane integrity is observed under insertion. We proceed to the uterine opening digitally to avoid less trauma and thus preventing rupture of the membranes. Once the complete hysterotomy hand, serving as mechanism "spatula" approaching fetal exterior parts, while the assistant exerts controlled pressure on the fundus to facilitate extraction with the least possible manipulation is introduced. Once completely extracted fetus "In caul", he proceeds to artificial amniorrhesis.

Fetal extraction with intact membranes or "caul" preterm fetuses appears to offer benefits to the fetus, pulmonary complications, and getting better scores on the Apgar test. It is therefore recommended standardization of this technique, its implementation in large maternities attention to extremely premature. Learning the technique is not easy, requires great handling capacity and careful handling, the performance of the expert hands of an experienced obstetrician matter being required.

COI Disclosure: None declared
TOPIC: INTRAPARTUM CLINICAL TARGETS

ID: 119

TITLE: NEONATAL MORBIDITY AFTER FORCEPS DELIVERY IN TWO PERIODS IN TERTIARY HEALTHCARE FACILITY IN SERBIA

AUTHORS: Vrzić Petronijević S1,2, Petronijević M1,2, Bratić D2, Nikolić T2, Jestrović Z2

AFFILIATIONS: 1 Faculty of Medicine, University of Belgrade, Serbia 
2 Clinic of Gynecology and Obstetrics, Clinical Centre of Serbia, Belgrade

CONTENT:
Introduction: The aim of this study was to compare neonatal morbidity after forceps delivery in tertiary healthcare facility in Serbia in two periods.

Methods: Retrospective comparative study was performed. We analysed maternal morbidity after forceps delivery in two periods: I (1985-1988) and II (2013-2016). Obtained data was analysed by Student’s t-test.

Results: In I period there were 483 forceps deliveries out of total 35,086 deliveries (1.38%), in II period 39 forceps deliveries out of total 17,332 deliveries (0.22%), I:II t=16.02; p<0.01. Cesarean section rate in our Clinic was: I period 8.44%, II period 34.23%; t=-78.55; p<0.05. Neonatal morbidity was analysed by following conditions: cephalhaematoma: I period 18.01%, II period 3.03%; t=4.33; p<0.05; intraventricular hemorrhage: I period 7 (7.66%), II period 4 (4.55%) t=1.23; p>0.05; III period: 0. t=2.66; p<0.01, and fracture of the clavicle: I period 6.42%, II period: 0. t=5.76; p<0.01.

Conclusion: No significant differences between Apgar score and birth weight between two periods were noticed. Regarding more serious complications such as cerebral oedema and intracranial hemorrhage no significant difference was found between periods. Due to better judgement and rise in cesarean section rate, incidence of cephalhaematoma and fracture of the clavicle was significantly lower in second period.

COI Disclosure: Non declared
TOPIC: INTRAPARTUM CLINICAL TARGETS

ID: 250

TITLE: ALLOPURINOL AS A FETAL NEUROPROTECTIVE THERAPY DURING LABOR: A SYSTEMATIC LITERATURE REVIEW.

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AFFILIATIONS: 1. University of Calgary, Calgary, Canada

CONTENT:
Post-hypoxic-ischemic reperfusion damage is one of the mechanisms of brain damage in infants with hypoxic-ischemic encephalopathy (HIE). Allopurinol could be used as a potential agent for neuroprotective intervention. Maternal treatment with allopurinol during fetal hypoxia is a promising method to prevent severe neurological complications. This literature review aimed to evaluate the value of intrauterine neuroprotection after maternal administration of allopurinol on neonates.

The purpose of this review is to provide an overview of available data about the neuroprotective effect of maternal administration of allopurinol on the severity of neonatal HIE.

We conducted a systematic search of medical electronic databases: Google scholar, Ovid, Medline, PubMed, CINAHL, EMBASE, the Cochrane Library, Science Citation Index and Evidence-Based Medicine and hand searched related references.

Search terms included: newborn, Hypoxic ischemic encephalopathy, hypothermia, neuroprotection, neurodevelopmental impairment, allopurinol, brain damage, maternal treatment, intrauterine neuroprotection. We extracted the details of individual study characteristics from each publication, assessed study quality, evaluated the effect sizes of allopurinol treatment and assessed the influence of study design on the estimated effect size. The presence of small effect sizes was investigated using funnel plots and Egger’s tests.

212 records identified through database searching, 167 records removed.45 articles were found to be eligible for screening. Neuroprotective effect of allopurinol was described in 39 preclinical studies and in 6 studies on neonates with HIE. In 6 eligible articles we were looking for Level I evidence studies as a high-quality randomized trial or prospective study, sensible costs and alternatives, values obtained from many studies with multiway sensitivity analyses, RCTs and Level I studies. Reviewed studies were highly heterogeneous in design, approach, and outcomes. There is no single study with level I of evidence. Despite all above-mentioned limitations, four studies supported neuroprotective efficacy of maternal administration of allopurinol.

In our review, we found a limited number of highly heterogeneous sources. However, all reported sources reinforce that allopurinol has a value as a neuroprotective add-on therapy in infants with HIE. Maternal administration of allopurinol could possibly alleviate the severity of neonatal HIE.

COI Disclosure: None declared
The ideal epidural analgesia in labor has to be effective in providing adequate pain relief without negative interference with the natural process of birth and unintended side effects. Two types of epidural analgesia: intermittent and continuous have been commonly and widely used during labor. In this prospective trial our objective was to determine the effect of continuous and intermittent type of epidural analgesia on the cesarean delivery rate and other secondary outcomes.

In this trails totally 302 low risk nulliparous parturients in term pregnancy (37-42 weeks) were enrolled to recieved intermittent or continuous type of epidural analgesia in labor. Our exclusion criteria were: preterm delivery (delivery < 37 weeks); parturients with systemic disease (e.g. heart disease, renal disease, asthma, diabetes mellitus, hypertension) and with chronic analgesic use; parturients who had contraindications to neuraxial blocks (e.g., coagulopathy, thrombocytopenia); multiple pregnancies; Breech presentation or other malpresentation and parturients with absolute indication for cesarean delivery (e.g. strait pelvis, placenta praevia). Before randomization all parturients received an initial bolus of 20 ml of levobupivacaine with fentanyl of 2 mg/ml.

In the intermittent group the dose of 20 ml of levobupivacaine with fentanyl of 2.5 µg/ml was given 60 minutes after the initial dose. The next dose was admitted when parturient felt and report a presence of abdominal discomfort or contractions.

In the continuous group the infusion of levobupivacaine with fentanyl in the identical concentration was started through the infusion pump (Perfusor compact type 201-499). The infusion rate was increased up to 14 ml/h when analgesia was inadequate, and analgesia was continued until delivery.

The primary outcome was: incidence of cesarean deliveries between 2 groups whereas secondary outcomes were: incidence of fundal pressure maneuvers; dose of anesthetic; duration of labor from beginning of epidural anesthesia to delivery; neonatal status (neonatal weight, Apgar score at 1 and 5 minutes, umbilical pH) and maternal status (intrapartum fever (temperature > 38.5 C), motor blockade hypotension in labor, episiotomy, perineal tears 3rd/4th degree, retained placenta and postpartum bleeding (bleeding > 500 ml)

Totally 302 pregnant women were enrolled in the study, 150 in continuous group and 152 in the intermittent group. The primary outcome incidence of cesarean deliveries was statistically significant higher in continuous group (25 versus 10, RR 95%CI 2.91 [1.09 – 7.72], p 0.03).

Among the secondary outcomes statistically significant differences were found in number of fundal pressure maneuvers (34 versus 19, RR 95%CI 2.12 [1.09 – 4.09], p 0.02), dose of levobupivacine (ml) (75 [50-90] versus 40 [40-60] , p < 0.001), dose of Fentanyl (µg) (187.5 [125-450] versus 100 [100-300], p < 0.001) and motor blockade (21 versus 6, RR 95%CI 10.68[1.40 – 81.24], p 0.01). All these outcomes were higher in continuous group.

Our results show that continuous type of epidural anesthesia might be associated with higher rate of cesarean deliveries, higher dose of opioid and non opioid anesthetic and increased rate of fundal pressure maneuvers without any difference in duration of labor or any other observed outcomes.
TOPIC: INTRAPARTUM CLINICAL TARGETS

ID: 343

TITLE: POSITION OF EXTERNAL CEPHALIC VERSION AFTER 36 WEEKS OF GESTATION IN MODERN OBSTETRIC PRACTICE

AUTHORS: L. Hruban 1; P. Janků 1; A. Jouzová 1; K. Jordánová 1; R. Gerychová 1; M. Huser 1; P. Ventubra 1

AFFILIATIONS: 1 Department of Obstetrics and Gynecology, Masaryk University, University Hospital Brno, Brno, Czech Republic

CONTENT:
Evaluation of success rate and the safety of external cephalic version after 36th week of gestation

A retrospective analysis of external cephalic version attempts performed on a group of 746 singleton breech pregnancies after 36 weeks gestation in the years 2003–2017 at the Department of Gynecology and Obstetrics, Masaryk University, Brno, the Czech Republic. The effectiveness, number and type of complications, mode of delivery and perinatal result were observed.

The effectiveness of external cephalic version from breech to head presentation was 48.3 % (360 cases). After a successful external cephalic version 285 patients (79.2 %) gave birth vaginally. After unsuccessful cephalic version 145 patients (37.6 %) gave birth vaginally. The number of serious complications did not exceed 0.9 % and did not affect perinatal outcomes. The death of the fetus in connection with the external version has not occurred in our file. Spontaneous discharge of amniotic fluid within 24 hours after procedure occurred in 7 cases (0.9 %). The spontaneous onset of labor within 24 hours of procedure occurred in 5 cases (0.7 %).

The external cephalic version of the fetus in the case of breech presentation after the 36th week of pregnancy is an effective and safe alternative for women who have a fear of the vaginal breech delivery. Performing the external cephalic version can reduce the rate of elective caesarean sections due to breech presentation at term.

COI Disclosure: Supported by Ministry of Health, Czech Republic - conceptual development of research organization (FNBr, 63269705)
Birth videos have become a popular method for learning about upright breech birth. Case analysis of videos enables development of pattern recognition skills to distinguish normal from pathological birth. Use of birth video training can support a safe, sustainable breech birth service even when numbers are small. We identify several features of upright breech births through a structured analysis of birth videos, in order to create evidence-based descriptions for future teaching and research.

We performed a pilot structured analysis of 42 upright breech birth videos, using videos obtained from our personal teaching collections and publicly available on-line. Two researchers watched each video and described relevant clinical details and events to be analysed. A data collection tool was created on an Excel spreadsheet. This comprised more than 80 items, including timings of birth of pelvis, umbilicus, arms and head and all interventions. Following an initial analysis, the team met to discuss and agree changes to the data collection tool. A second analysis of each video was completed and discrepancies were discussed and resolved by agreement. Calculations were made using STATA software.

In our sample of upright breech births, a completely spontaneous birth occurred in 11/42 cases. Among spontaneous births, the mean time between the birth of the fetal pelvis (bitrochanteric diameter) and the completed birth was 1:19, Md=0:56 (IQR 0:14,1:36). Among the remaining cases, the following manoeuvres were used: shoulder press to flex the aftercoming head in mid-pelvis (n=24), buttock lift to assist shoulder press (n=6), Mauriceau Smellie-Veit / modified MSV (n=6), assist fetal head (n=2), sweeping down arm/s (n=15), rotational manoeuvres to release a nuchal arm (n=6), conversion into supine maternal position (n=2). We also describe the average amount of time required to resolve clinical problems with upright breech manoeuvres.

This analysis of systematically gathered birth video data is the first study to provide evidence for defining normal and pathological features of physiological breech births. We have demonstrated that any delay > 1 minute 36 seconds after birth of the fetal pelvis has a significant likelihood of obstruction that can be resolved with appropriate assistance. We advocate a prospective study, including outcome data, to inform globally accessible on-line training alongside local hands-on simulation.

COI Disclosure: None declared
Uterine leiomyomas, or fibroids, are benign tumors of the smooth muscle of the uterus. Most women are asymptomatic, but others refer pain, heavy menstrual bleeding, and infertility. Their implications during pregnancy have been controversial for years. They can grow or diminish in size; and depending on the location, cause complications like miscarriages, pre-term labor, and disruption of vaginal delivery.

A 38-year-old woman came to our hospital to continue her prenatal care at 35+3 weeks of gestation, with a history of a leiomyoma measuring 150x93x130mm, located at the lower uterine segment. She had been previously controlled at a different hospital and referred a normal pregnancy and no relevant medical history. Because of the size and location of the tumor, a cesarean section was scheduled at 39+1 weeks. She was properly informed of the risks and the need for a classical hysterotomy for the delivery of the baby; and of the possibility of a hysterectomy in case of excessive bleeding. She had a hemoglobin of 13.4g/dL prior to the surgery. The operation was performed via supra and infra-umbilical laparotomy, delivering a healthy female baby, weighing 3340g, through a classical hysterotomy. A giant uterine leiomyoma of at least 30cm was observed occupying the pelvis up to the umbilicus, similar to a uterus of 20-24 weeks of gestation. Due to the increased risk of severe hemorrhage, there was no attempt to remove the leiomyoma during the surgery. Puerperal evolution continued as normal and without incidences. Her hemoglobin at discharge was 13g/dL.

While mostly asymptomatic, large leiomyomas can cause complications during pregnancy, making it impossible to attempt a vaginal delivery in some cases. A cesarean section is a suitable option, with the increased risks of a classical hysterotomy and its repercussions in future pregnancies, a laparotomy incision, and the increased risk of hemorrhage. There is evidence against removing the leiomyoma at the same time unless the procedure cannot be safely delayed.

COI Disclosure: None declared.
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 56

TITLE: 8TH C-SECTION IN THE SAME PATIENT


AFFILIATIONS: Obstetrics and gynecology dept. Santa Lucia University Hospital, Cartagena, Spain

CONTENT:
The cesarean section rate is increasing throughout the world for decades. The desire in many regions or countries have a high number of children with the lack of effective contraceptive measures is causing the emergence of a new type of patient, pregnant with multiple repeat cesarean (MRCS). Complications in these patients are frequent and morbidity is increased. Nevertheless, data on the risks and the management of this patient are still very limited.

Our patient is a woman of 39. No backgrounds of interest. His surgical history is 8 caesarean sections and curettage. Her obstetric formula is G11C8A3. It does not use contraception and tubal ligation has refused on several occasions for cultural reasons. The shortest interval between time and over was 16 months between the 2nd and 3rd C-section and the longest 38 months between 7th and 8th cesarean section.

Regarding complications during pregnancy, the principal has been the threat of premature birth due to uterine dynamics. There have been episodes that required hospitalization in 5 of the 8 cesareans.

About intraoperative complications, the principal has been the presence of previous accessions, present from the 2nd c-section. Due to them in the 4th cesarean was not possible to access the required segment and performing a body incision, which will be repeated in the following interventions. Despite this, no damage to peripheral organs in any intervention, or increased blood loss and need for transfusion. Neither it has been no episode of placenta previa and / or accreta.

Postoperative has been surprisingly good in all interventions. There were no episodes of urinary tract infection, wound infection, respiratory infection, and thromboembolic disease. Blood counts have always shown control hemoglobin above 10 mg / dl and has not required transfusions. Hospital stay was between 3 and 5 days, with a mean of 4 days.

Multiple repeat cesarean deliveries are at increased risk of complications with increased maternal mortality and morbidity. Most of this increase in complications occur in the subgroup of placenta previa and / or accreta. Nevertheless, the obstetrical outcomes in absolute terms are very good. It is currently considered that morbidity increases progressively from the first C-section, with some cutoffs established authors.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 114

TITLE: LABOR AFTER SUCCESSFUL EXTERNAL CEPHALIC VERSION

AUTHORS: R. López-Pérez 1; M. Velasco-Martínez 1; L. Batres-Martínez 1; J. Peiró-Jornet 1; G. Ruiz-Merino 2; M. Lorente-Fernández 1

AFFILIATIONS: 1 Obstetrics and Ginecology Dept. General University Hospital Santa Lucía, Cartagena, Spain
2 Biostatistics, Instituto Murciano de Investigación Biosanitaria, Murcia, Spain

CONTENT:
External cephalic version (ECV) is a procedure to try to turn a breech foetus to cephalic by externally manoeuvring the maternal abdomen. It is considered a safe procedure and with a high success rate. ECV increases the vaginal birth and may reduce the cesarean rate.
Different results reported an increased cesarean rate after a successful ECV with no increased adverse perinatal outcomes.
This study evaluate the mode of delivery and perinatal outcomes.
From March 2013 to October 2018, 286 ECV have been performed at Hospital General Universitario Santa Lucía, with 195 successful (68,1%).
We conducted a retrospective matched study comparing case group of 195 successful ECV and 309 women with spontaneous cephalic presentation aleatory collected. Both groups were statistically similar (maternal age, parity and gestational age).
Perinatal outcomes were collected: gestational age at ECV, days from ECV to birth, gestational age at birth, mode of start of labour (spontaneous, induction, cesarean), mode of delivery (eutocic, instrumental or cesarean section), indications of induction or cesarean, newborn weight, umbilical cord blood acid-base analysis at delivery and admission in Neonatal Unit.
The ECV success rate was 68.4%. The mean days from VCE to birth was 13.5 days (range 0-35).
Both samples were homogeneous. The mean maternal age of case and control groups was 32 and 30 years, respectively. Nulliparous 48,2% and 44%, multiparous 51,8% and 56%, and previous CS 12,8% and 12%. Medium gestational age at delivery was 278 and 279 days respectively. In the ECV group, an increase in the induction of labor was observed (39.0% and 35.3% for p <0.05) and elective CS because of the abnormal repositioning of the fetus in 8 cases (4%) and bleeding in 3 cases (1.6%). In the ECV group there were 146 (74.9%) vaginal births, and 49 (25.1%) CS, compared to 265 (85.8%) and 44 (14.2%), % in controls (p <0.05). No other differences were found.
A ECV should be offered to pregnant women with term breech presentation with intention of trying vaginal delivery in cephalic, since ECV is a technique with a high success rate. ECV is safe, it does not increase the risk of complications or adverse neonatal outcomes. The ECV is associated with a higher rate of induction of labor and a higher rate of cesarean section during labor compared to spontaneous cephalic presentation, but it is still much lower than the rate in breech presentation.

COI Disclosure: None declared
Title: Perinatal Acidosis in Obese Pregnant Patients: Role of Induction of Labor.

Authors: Accordino F 1; Ornaghi S 1; Di Giambattista S 1; Maini M1; Locatelli A 2; Vergani P1.

Affiliations: 1 Department of Obstetrics and Gynecology, San Gerardo Hospital MBBM Foundation, University of Milano-Bicocca, Monza, Italy; 2 University of Milano Bicocca, Milan, Italy; Department of Obstetrics and Gynecology, Carate Brianza Hospital, ASST Vimercate, Italy.

Content:
Obesity is a worldwide issue and a progressively increasing concern in the field of MFM and it is associated with an increased risk of pregnancy-related complications, and to adverse perinatal outcomes, such as neonatal acidosis. However, risk factors for neonatal acidosis among obese women have not been specifically investigated yet. Here we assess potential factors associated with a pH at birth <7.10 in a cohort of neonates delivered by pregnant women with pregestational obesity.

Retrospective observational study including all women with pregestational BMI ≥30 Kg/m2 and a singleton pregnancy who were managed and delivered at Foundation MBBM – Monza Hospital and Carate Brianza Hospital from 5/2017 till 4/2018. Patients were classified into two groups according to umbilical artery (UA) pH value evaluated at birth: group 1) neonates with pH <7.10, and group 2) neonates with pH ≥7.10. Statistical analyses were performed using SPSS software (vers. 24) with significance set at p<.05.

Cord blood gas analysis values were available in 184 (80%) cases, 12 of whom displayed umbilical artery (UA) pH at birth <7.10 (group 1). Two groups did not differ for maternal characteristics like maternal age, nulliparity, pregestational chronic disease, mean pre-pregnancy BMI and weight. Women whose babies had a UA pH at birth <7.10 had significant high incidence of pregnancy-induced hypertension (PIH) (33.3% vs 9.5.2%, p=.006) and gestational diabetes (58.3% vs 27.9%, p=.04). 91.6% of women in group 1 had induction of labor (IOL) (vs 39.5%, p=.00). Regression logistic analysis showed that PIH and IOL increase the risk of UA pH <7.10 respectively of 12.5-fold (95% CI 2.23-70.7, p=.04) and 15.2-fold (95% CI 1.6-141.6, p=.016).

Our results suggest that PIH and IOL are independent risk factors for neonatal acidosis, defined as UA pH <7.10, in obese pregnant patients. The association between IOL and low pH at birth in women with pregestational obesity has never been reported before. Future studies investigating the potential etiological factors underlying the increased risk of neonatal acidosis in obese patients with induced labor are warranted.

COI Disclosure: Non declared.
There is evidence that infants born late preterm (34-36.6 weeks) are at greater risk for morbidity than term infants. Evidence for optimal timing of delivery related to some pregnancy complications at late preterm gestation is limited. Sometimes labor timing is longer than term births and also have a high rate of cesarean section, because the babies weight is low or for some associated pathology. We wanted to check out what happens in our department in this period of pregnancy.

In our hospital, there were 6219 births between 2012 and 2017, of which 295 (4.79%) occurred between 34.0 – 36.6 weeks. Twins (47) and elective cesarean (35) were excluded, and we only studied gestations that started labor (213). 213 women tried vaginal delivery, there were 65 (30.52%) births by cesarean section, the remaining 148 had vaginal deliveries (69.48%), of which 29 (19.59%) had an operative vaginal delivery. (Figure 1) We didn’t find significant differences between newborns weights of both groups (cesarean sections and vaginal deliveries). (Figure 2)

First stage dystocia and second stage dystocia were the main causes for cesarean sections. (Figure 3) When we compared cesarean sections and vaginal deliveries, we saw significant differences (p 0.05) in the first stage of labor. It was longer in cesarean sections (6.38 hours) than in vaginal deliveries (5.15 hours). We also observed that second stage of labor was similar in both groups. (CS 1.48h vs VD 1.42h). (Figure 4,5) We found significant differences in women IMC like maternal factor, higher in the cesarean group (IMC 29). On the contrary, we didn’t find theme in age, parity or if it was an induced labor.

Our results were similar to the literature. At the moment, our way of working is good but we can improve it. Further research is needed to understand the underlying reasons for the increase in cesarean section deliveries resulting in preterm birth.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 186

TITLE: INTACT AMNIOTIC SAC FETAL EXTRACTION IN EXTREMELY LOW BIRTH WEIGHT

AUTHORS: J. Barrenetxea; C. Larrañaga; B. Gastón; I. Zabaleta; M. Ruiz; M. Bazán

AFFILIATIONS: Complejo Hospitalario de Navarra, Pamplona, Spain

CONTENT:
15% of preterm births are prior to 32 weeks. A cesarean delivery might be necessary but this can present many challenges. The uterus is less distended than with a term fetus and the lower uterine segment is thicker making the hysterotomy incision deeper and bloodier. These fetuses are premature and smaller, their bones and soft tissues are more delicate and prone to injury. To avoid iatrogenic injury, the pressure applied extract them should be much less than that used for a normal term fetus.

A retrospective observational study was performed and very preterm infants who underwent caesarean delivery were analyzed from 2016 to 2018. 21 cesarean sections where performed at 30 weeks of gestational age or below, only singleton pregnancies were taken into a count. Average gestational age was 27+4 weeks. Average weight of the newborns was 980 gr. There were no differences in gender (50% were male and 50% were female). A low transverse uterine section was performed in all cases, but a corporal extension was needed in three cases. An “inverted T” extension was performed in those cases. There was a case where the use of a forceps was required for the fetal head extraction in a breech presentation.

In 5 cases of 21 cesarean sections, external damages were described in the newborn being body and face ecchymosis the most common ones. There is a case where a subependymal hemorrhage was described. The intact amniotic fetal extraction, is a way of trying to decrease iatrogenic injuries which can undergo during the fetal extraction. This procedure was performed in two cases (27 and 27+6 weeks of gestational age). No external injuries were described in the newborns after the procedure. In one of the cases the total fetal extraction was performed with intact sac. In the other case, part of the body was extracted, during the procedure the amniotic sac broke itself, but the amniotic fluid current helped in having a non traumatic extraction.

A way of trying to avoid iatrogenic injury to the newborn is by performing an intact amniotic sac fetal extraction. It is reasonable to think that amniotic fluid can play a role as a cushioning structure, to ease the fetal extraction. There is low evidence in the matter, and more studies must be done but trying to perform an intact sac fetal extraction could help to minimize iatrogenic injuries caused in very low weight newborns that have to undergo a cesarean section.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 223

TITLE: CTG TRACE, CLINICAL PICTURE AND CHECK LISTS FOR DETECTING A CHORIOAMNIONITIS: A MEANINGFUL COCKTAIL!

AUTHORS: I.Dichala 1; Y.Gomez 2; M.Pagnozza 3; A.Farin 4

AFFILIATIONS: Riviera-Chablais Hospital, Vaud, Switzerland

CONTENT:
The majority of international guidelines used nowadays for CTG interpretation have low sensibility and specificity in detecting intraamniotic infection, a condition with nonspecific clinical signs and associated with potentially devastating foetal complications.

We describe a misinterpreted case of chorioamnionitis during labour in which the progressive increase of the fetal heart rate baseline could have raised the suspicion of an underlying infection earlier. The use of a new approach regarding CTG traces reading could have led to a better care.

Following international guidelines, CTG interpretation relies on a timeframe from 1 to 90 minutes depending on no-reassuring fetal heart rate tracing. In order to properly analyze variations during labour the fetus should always be used as its initial own reference. This interpretation method could improve the prompt recognition of the first sign of intraamniotic infection, or, in some cases, the detection of hypoxic events. Nowadays the use of check lists at regular time interval enables to highlight modifications during labour by forcing a non automatic CTG interpretation which takes into account the whole clinical picture for its final interpretation.

This new approach to CTG interpretation, as proposed by an international consensus panel led by the team of Saint George’s Hospital in London, seems to complete the information on foetal state given by the various international guidelines (FIGO, NICE, ACOG), contributing in the early detection of an intraamniotic infection. Therefore, in our institution, we have implemented a regular training course based on this approach of CTG interpretation and check list use for all staff in our labor ward.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 234

TITLE: STILLBIRTH AND SUBSEQUENT PREGNANCY OUTCOME

AUTHORS: M. Pekkola 1; M. Tikkanen 1, M. Gissler 2; J. Paavonen 1; V. Stefanovic 1

AFFILIATIONS: 1 Department of Obstetrics and Gynecology, University of Helsinki and Helsinki University Hospital, Helsinki, Finland
2 THL National Institute for Health and Welfare, Helsinki, Finland

CONTENT:
Previous stillbirth predisposes to adverse pregnancy outcomes in the subsequent pregnancy. The purpose of this study was to assess subsequent pregnancy outcome in women with a history of stillbirth in a large tertiary obstetrical unit.

This retrospective study was conducted at Helsinki University Hospital, Helsinki, Finland. The index cohort comprised 214 antepartum singleton stillbirths ≥ 22 + 0 gestational weeks or with a birth weight of ≥ 500 g from 2003 to 2015. Of these, 154 achieved a new pregnancy ending in delivery by the end of 2017. Data including baseline characteristics and pregnancy outcomes were obtained from the hospital charts and were compared to data from the Finnish Medical Birth Register.

The majority of the case women (57.9%), conceived within 18 months after stillbirth. Induction of labor was more common among the deliveries of the case women compared to the parous women in the reference group (49.4 vs 18.3%, p < 0.001). Duration of pregnancy was shorter among the case women compared to controls (38.29 ± 3.20 vs 39.27 ± 2.52, p <0.001), and mean birth weight lower among newborns of the case women compared to newborns in the reference group (3274 ± 770 vs 3491 ± 674 g, p <0.001). Incidence rates of SGA (7.8 vs 2.2%, p < 0.001), preeclampsia (3.3 vs 0.9%, p = 0.002), preterm birth (8.5 vs. 3.9%, p = 0.004), and stillbirth (2.7 vs 0.3%, p < 0.001) were higher among case women. There were four recurrent stillbirths.

Although the rates for adverse pregnancy outcomes are higher compared to the parous background population, the overall probability of a favorable outcome is good. These findings may be useful in counseling pregnant women with a history of stillbirth.

COI Disclosure: The authors have stated explicitly that there are no conflicts of interest in connection with this article.
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 243

TITLE: IMPACT OF CANCER IN THE MANAGEMENT OF DELIVERY: 10 YEARS OF VARIATIONS

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CONTENT:
Active-during-pregnancy-cancer (ADPC) is an uncommon condition which occurs in 1/1000-2000 pregnancies and common attitudes are abortion, preterm delivery and cesarean section. Not-active-during-pregnancy-cancer (NADPC) is an increasing medical problem among young adults; lower fertility and increased rate of low birth weight are often reported. Our aim is to analyze the impact that the pregnancy-related neoplastic disease has on management of deliveries in the decade 2006-2015 in our Institute.

We collected obstetric and oncological data about 205 patients bearing a history of cancer in S. Anna Hospital of Turin: 59 patients ADPC and 146 patients with pregravidic NADPC. We also realized sub-analyses on patients who carried out pregnancies over the 30th weeks with alive and vital fetus: 48 of 59 ADPC patients 120 of 146 NADPC patients were selected.

In ADPC patients the most represented type of cancer was mammary (45.8%). We registered 3.4% miscarriage and 15.3% iatrogenic abortion. The type of delivery was vaginal delivery (VD: 22%) and cesarean-section (CS: 59.3%). Induction of labour was 14.6%, elective CS was 68.8%. the indication for these procedures was 78.6% oncological. The average gestational age was 35.5 weeks.

In NADPC patients the most represented type of cancer were hematologic malignancies (22.6%). We registered 9.6% miscarriage and 8.2% iatrogenic abortion. The type of delivery was VD (43.2%) and CS (39%). Induction of labour was 11.7%, elective CS was 36.7%; the indication for these procedures was 77.5% obstetrical. The average gestational age was 38.3 weeks.

10-years trends in ADPC patients and NADPC patients showed an increase of VD. We noticed a decrease in elective CS and an increase of induction of labour. In 10 years we observed not significant reduction of gestational age. A contemporary decrease of oncological indications for CS in ADPC and NADPC patients was reported.

COI Disclosure: None declared
Breech presentation occurs in 3-4% of pregnancies. They are known risks that are attributed to both breech delivery and cesarean deliveries, for mother and fetus. For this reason ECV of the breech presentation technique is currently recommended. The success of this technique is based on increasing the rate of fetuses in cephalic presentation at the time of delivery and decreasing the rate of cesarean delivery. There is scientific evidence of quality with a low complication rate of this technique.

A retrospective study was designed with singleton pregnancies (N = 185) aged pregnancies between 36 and 40 weeks with ECV technique carried out between 2012 and 2017 in the University Hospital of Fuenlabrada, Madrid. Patients were advised of risks and benefits of each option in the ultrasound of 34 weeks. ECV was performed by obstetrics and gynecology specialists with little experience performing the technique. They analyzed based on percentages to calculate the success probability and the percentage of vaginal births after successful ECV. A statistical analysis was also conducted to estimate the association between the variables and the successful outcome of the technique, using χ² tests and Student t.

Of all the pregnant women included in the study (N: 185), 49.18% were nulliparas, the 38.37% with a previous birth; and the remaining were grand multiparous (9.72%) or had a previous c-section (2.73%). The most common presentation was the frank breech position 62.67%, followed by 12% of incomplete breech and 8% of complete breech presentations. Taking the five years into consideration, the ECV had a success probability of 50.5%, with a percentage of vaginal deliveries in patients with successful ECV of 66.7%. A statistically significant association between VCE success probability and type of breech presentation with a variety of frank breech position (p = 0.007) was obtained. The main cause of failure appreciated was the described maternal pain.

Selected patients should be counselled and offered ECVs. It is a safe successful procedure that may reduce caesarian sections rates. These results are important for clinical practice because they can motivate professionals to use ECV and these also provide information to mothers to trust ECV technique, which has a low complication rate and gives them the possibility of have a vaginal birth in cephalic presentation.

**COI Disclosure:** “None declared”
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 260

TITLE: PERFORMING A GENTLE CAESAREAN SECTION (GCS) FOR A BREECH PRESENTATION: MATERNAL AND NEONATAL OUTCOME

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CONTENT:
The GCS has been introduced as an alternative to the conventional caesarean section. The GCS aims to optimize the wellbeing of mother and child by simulating certain aspects of a vaginal delivery. A breech position is one of the indications for a planned caesarean section. To our knowledge there are no publications on maternal and neonatal outcome concerning a GCS for breech position. The aim of this study was to compare the maternal and neonatal outcome of a GCS in cephalic and breech position.

This retrospective study analysed the outcome of women who met the inclusion criteria and underwent a GCS, starting from the introduction of the GCS in December 2013 until November 2018 in the University Medical Center Groningen. In a group of 180 women a GCS was successfully performed. Main maternal outcomes were blood loss, infection, type of feeding, and a prolonged admission. Main neonatal outcome measures were APGAR score, birthweight, glucose, cord blood pH, hypothermia, hyperbilirubinemia, infection, need for consulting the paediatrician, postnatal complications and admission to the neonatal intensive care ward. The neonates in cephalic position were compared to breech position using Chi-square, Mann-Whitney U, and t-tests (P=0.05).

We analysed 120 cases in cephalic position compared to 60 in breech position. The APGAR 1 was significantly lower for breech position, P=0.019. The neonatal temperature was also lower in breech position (36.8°C ±0.36) versus cephalic position (36.9°C ±0.39), P=0.046. There was one case of severe hypothermia, this was a neonate in breech position with an unexpected low birthweight (<p10). Birthweight was significantly different between the two groups, (P=0.009). Also a birthweight p90 was significantly more in cephalic position, P=0.027. For maternal outcomes, there was significantly more blood loss in cephalic position (441 ±230) than breech position (353 ±151), P=0.002.

There was a significant difference between the groups for neonatal APGAR 1, first neonatal temperature, birthweight and maternal blood loss. However, there was no difference in APGAR 5 and 10. The temperature and blood loss could be explained by the differences in birthweight. In conclusion, when performing a GCS, there is no clinical significant difference in outcome between a cephalic and a breech presentation and so it seems safe to perform a GCS for breech presentation.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 261

TITLE: VAGINAL DELIVERY IN WOMEN WITH HIV IN ITALY: RESULTS OF FIVE YEARS OF IMPLEMENTATION OF THE NATIONAL SIGO-HIV PROTOCOL

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CONTENT:
In 2011 in Italy the HIV Study Group of the Italian Society of Gynaecology and Obstetrics released a clinical protocol for vaginal delivery (VD) in women with HIV, in order to collect further evidence on the safety of VD and promote uniform clinical practice among obstetric centers caring for these women. Objective: to evaluate the maternal and neonatal safety of VD in women with HIV and to define the impact of the protocol in clinical practice during the first five years of its implementation.

A common protocol for vaginal delivery was offered to all eligible women who presented antenatally at the twelve participating clinical sites. The analysis considered all pregnancies who delivered at the participating centers between 01/01/2012 and 30/09/2017. Data collection and definition of outcomes followed the procedures of the National Program on Surveillance on Antiretroviral Treatment in Pregnancy. Pregnancy outcomes were compared according to mode of delivery, classified as vaginal (VD), elective cesarean (ECS) and non elective cesarean section (NECS). The main outcomes evaluated were delivery complications, HIV transmission, maternal and infant mortality, birth defects, low and very low birthweight.

Among 580 women who delivered between January 2012 and September 2017, 142 (24.5%) had a VD, 323 (55.7%) an ECS and 115 (19.8%) a NECS. The proportion of VD increased significantly over time, from 18.9% to 35.3% (p<0.001). Women who delivered vaginally were younger, more commonly nulliparous, diagnosed with HIV during current pregnancy, and antiretroviral-naïve, and had a slightly longer duration of pregnancy with significantly higher newborn birthweight. No cases of HIV transmission were observed with VD (overall rate: 0.4%). The rate of delivery complications in the early postpartum period was limited (11.2%), with no significant differences between VD and ECS, and significantly more common with NECS compared to ECS.

Vaginal delivery in HIV-infected women with suppressed viral load appears to be safe, with a low rate of peripartum maternal complications, and good neonatal status and birthweight. No cases of HIV transmission were observed. Despite an ongoing significant increase, the rate of vaginal delivery among women with HIV in Italy remains relatively low compared to other countries, and further progress is needed to promote preference for this mode of delivery in clinical practice.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 262

TITLE: PREGNANCY OUTCOMES AFTER SINGLE PREVIOUS CAESAREAN SECTION

AUTHORS: H. Veloso; D. R. Martins; M. L. Moleiro; R. Brás; J. Braga

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CONTENT:

Thirty to eighty percent of women with one previous caesarean section can, in the next pregnancy, achieve vaginal delivery. However, the risk of uterine rupture and other morbidities, remain major concerns for practitioners. In our tertiary care hospital, women who have undergone a single previous caesarean delivery either initiate spontaneous labour or reach the 41st week of gestation and have a planned caesarean.

A retrospective and descriptive analysis of medical records concerning women with previous caesarean section who delivered at our medical centre between January 2015 and December 2017 was carried out. A random sample of 60 women were selected, using Excel® random selection. Afterwards, using the same randomization, a control group with 30 women was created including women with single previous vaginal delivery. Statistical analysis using IBM SPSS Statistics 21® was then performed considering various demographic and clinical parameters. Continuous data were analysed with independent sample t-test, while categorical variables were analysed using the chi-square test. A p-value ≤0.05 was considered statistically significant.

A total of 90 women were included in the study, 60 with one previous caesarean delivery (CD) and 30 with single previous vaginal delivery (VD). The median age was 32 years, 30 years for the VD group and 32 years for the CD group. The mean gestational age at delivery was the same for both groups, about 39 weeks and 3 days. All 30 women from the VD group had a second vaginal delivery while in the CD group 46.7% had a vaginal delivery (50% normal deliveries and 50% instrumented deliveries) and 53.3% had a second caesarean birth (almost 85% elective procedures), which was a statistically significant difference (p<0.005). There were no significant differences in gestational, maternal or foetal complications between the two groups.

In this analysis we can observe that about 50% of women with previous caesarean section will have a second caesarean delivery and that previous vaginal birth is a major predictor of vaginal deliveries in future pregnancies. However, there were no complications associated with trial of labour, including uterine rupture. Therefore, in selected situations, where the woman initiates spontaneous labour, trial of labour after a prior caesarean is safe and often successful.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 272

TITLE: WHEN PRENATAL DIAGNOSIS COULD CHANGE PROGNOSIS: A SINGLE-INSTITUTION SERIES OF 13 CASES OF VASA PREVIA

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CONTENT:
Vasa previa is a rare obstetric complication with an incidence of 0.02-0.08%, but probably underestimated. They are defined as foetal vessels that run through the free placental membranes near uterine internal os under the foetal presenting part and are likely to bleed when the membranes rupture spontaneously or artificially. As the total foetal blood volume is about 80–100 ml/kg, even a minimal bleeding of these vessels could be rapidly fatal for the foetus or lead to major complications.

Retrospective study of all cases of vasa previa in women that delivered at our tertiary centre from 2007 to 2018. Cases were identified using hospital records and perinatal database. Vasa previa was suspected at transvaginal ultrasound scan as an echogenic structure, linear or circular, close to the uterine internal os with blood flow at colour Doppler, between 20 and 35 weeks of gestational age. Diagnosis was confirmed at delivery and/or by pathologist. About 92% of our cases had one or more risk factors: second-trimester placenta previa, conception by assisted reproductive technologies, bilobed or succenturiate placenta, velamentous cord insertion. We compared outcomes between prenatal diagnosed cases and cases diagnosed at delivery.

Fourteen cases of vasa previa were identified among 85,827 women from 2007 to 2018 with an initial incidence of 0.01%, that became 0.05% in 2016-2018 (p=0.005): 12 had a prenatal diagnosis and 2 during labour. Eleven cases were confirmed at delivery or by pathologists. We had only 1 false positive, with a positive predictive value of 91.7% and a negative predictive value of 100%. These 12 cases had early hospitalization, corticosteroids administration and elective caesarean section (only 1 was urgent) at a mean gestational age at delivery of 35+3 weeks. No major neonatal complications occurred. In the 2 cases diagnosed postnatally an emergency caesarean section was needed due to massive vaginal bleeding, with neonatal death in both cases.

Vasa previa is a pathological condition with probably the higher perinatal mortality in case of rupture, especially if we consider that most of adverse outcomes are preventable. Our data support that midpregnancy ultrasound targeted screening using 2D transvaginal and colour Doppler scan in pregnancies at a high risk might help to identify this condition and significantly reduce the death rate of otherwise healthy newborns, especially considering the constant increase of this pathology.

COI Disclosure: None declared
Placenta accreta is a rare yet lifethreatening condition. Antenatal diagnosis of placenta accreta spectrum is very important, in order to plan a multidisciplinary approach and to minimize morbidity and mortality. However, the prenatal diagnosis is often difficult, especially in cases without risk factors. The aim of this study is to evaluate the maternal outcomes and the effects of conservative management in cases of placenta accreta diagnosed after vaginal delivery.

The study was retrospective and was carried out at the Maternal-Foetal Medicine Unit of the Sant’Anna University Hospital, Turin, Italy. Between January 2013 and December 2017, 21 cases of placenta accreta after vaginal delivery was identified with ultrasound examination in cases of retained placenta or incomplete placental expulsion. In all cases, we evaluated the presence of risk factors (such as previous caesarean/myomectomy/uterine curettage) and short and long-term outcomes (such as blood loss at delivery, need of blood transfusion, need of hysterectomy, rate of endometritis, need of surgical approach).

18/21 women presented a risk factor: 4/21 had a previous cesarean, 3/21 a previous myomectomy and 11/21 a previous uterine curettage. In 14 women the blood loss after delivery was 500 to 1000, whereas 7 was >1000. In all patients uterotonic drugs were administred and in 7 cases Bakri Balloon was needed. One case of peripartum hysterectomy after uterine curettage. In the remaining 20 cases we conducted a clinical follow up with ultrasound every 2 weeks:14 asymptomatic patients had a spontaneous resolution in 4-12 weeks. 6 patients had a persistent poor bleeding and/or vascularization at color doppler: 3 of these had a resolution after misoprostol administration and in the others 3 cases we performed resectoscopy after 3-6 months from delivery.

Conservative management in cases of placenta accreta accidentally encountered after vaginal delivery is safe and it is associated with a reduced maternal complication allowing reducing the need of uterine surgery and therefore reducing the risk for future pregnancy. An adequate follow up should be set in these patients.

COI Disclosure: None declares
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 297

TITLE: WHY DOES ANTI-D PROPHYLAXIS FAIL?

AUTHORS: R. Jerman 1; C. Isaksson 1; S. Sainio 2; K. Haimila 2; A. Korhonen 2; M. Kuosmanen 2; S. Natunen 2; I. Sareneva 2; K. Sulin 2

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CONTENT:
Anti-D is the most important antibody during pregnancy and a major cause of hemolytic disease of the fetus and newborn. Anti-D-immunization can be prevented with anti-D prophylaxis given after delivery, in other situations with possible fetomaternal hemorrhage (abortions, trauma, bleeding) and routinely at 28-30 weeks. Despite a systematic prophylaxis protocol, some women develop anti-D. Our aim is to find risk factors for the failure of anti-D prophylaxis and customize the national guidelines.

This was a retrospective nationwide study. We studied the prevalence of anti-D antibody and possible risk factors for the failure of anti-D-prophylaxis. All mothers in Finland with antenatal anti-D during 1.1.2014-31.12.2017 were included in the study. Data were collected from the Finnish Red Cross Blood Service and hospitals’ electronic patient files and contained information on blood group, antibodies, anti-D prophylaxis, obstetric history, and neonatal outcome. Risk factors for a larger fetomaternal hemorrhage were obesity (body mass index >30 kg/m2), Caesarean section, retained placenta, excessive bleeding (>1000 ml), multiple pregnancy and post-term pregnancy (41 weeks).

During the study period there were 232 women with antenatal anti-D in Finland (0.1% of all parturients). Majority of them (53.2%) were immunized already prior to 2014. The prevalence of anti-D has decreased progressively after the initiation of routine anti-D prophylaxis in Finland in 2014: from approximately 130/year to under 100/year: 85 cases in 2014 and 34 in 2017. Anti-D-prophylaxis failed in only a few cases when it was given according to the national prophylaxis program. Most failures were associated with risk-based situations (bleeding or trauma in early pregnancy) where anti-D prophylaxis had not been given. Also, the amount of fetomaternal hemorrhage was not routinely analyzed in cases where the risk for it could be higher.

Since introducing routine anti-D prophylaxis, the prevalence of antenatal anti-D has decreased expectedly. New immunizations have become most rare, but not extinct. Risk factors need to be studied further. In our study, the prophylaxis failed in only a few cases. Essentially, the most important failure occurs when anti-D prophylaxis is not given appropriately. Constant education of healthcare professionals is needed. Hemolytic disease of the fetus and newborn is best treated by preventing it.

COI Disclosure: None declared.
As the rate of primary cesarean section (CS) rises worldwide, more and more women present with a history of a previous CS. A trial of vaginal delivery in women with only one previous CS is not contraindicated, and can save these women from the risk of repeat CS, improving the outcomes for future pregnancies. The risk of symptomatic uterine rupture with TOLAC is relatively low (0.7%), especially if we are able to make an accurate selection of the patients who should attempt a vaginal birth (VB).

Our aim with this study was to evaluate the safety and success rate (SR) of vaginal birth after one low segment CS (LSCS) in our institution, and determine the factors that favors a successfully vaginal birth after CS (VBAC). We did a longitudinal descriptive retrospective analysis that includes a total of 192 pregnant women with a history of one previous LSCS that gave birth in our medical center over a period of one year. TOLAC was conducted in 154 (80.2%) women, and 38 (19.8%) underwent elective repeated CS delivery without labour.

The success rate of TOLAC was found to be 51.9%, including 61 (39.6%) normal deliveries, 17 (11%) vacuum-assisted deliveries, and 2 (1.3%) forceps assisted deliveries. The conversion rate to CS was 48.1%, being labour protraction and arrest the most common reason (61.4%), followed by fetal distress (22.9%). There were no uterine rupture cases or other relevant maternal morbidity. There was only one neonate transferred to the Neonatal Intensive Care Unit, after an emergent CS for placental abruption. The history of at least one previous VB was the most significant factor in favor of a VBAC, with 96.9% SR vs. 40.2% in the non-previous VB group, along with spontaneous labour, with 62.9% SR vs. 32.7% in the induction of labour group.

Attempting a vaginal birth after a CS has great importance as a way to decrease the number of repeated CS, and therefore improving the maternal and neonatal outcomes in the present and future pregnancies. Our results show that TOLAC seems to be a safe alternative, and that it should be offered in selected cases, whenever the women consents and there is no other contraindication to vaginal birth.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 321

TITLE: LABOUR AFTER PREVIOUS CESAREAN SECTION: WHICH RISK FACTORS MAY INFLUENCE DELIVERY TYPE?

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CONTENT:

In the last years worldwide there has been a dramatic increase in cesarean delivery rate. The paradigm “once a cesarean always a cesarean” has been reconsidered and, currently, it is considered valid to perform a trial of labour after a previous cesarean delivery. Preliminary characterization of the woman who may undergo this trial is essential to predict success and minimize risk. The purpose of this study is to determine the risk factors that can affect the delivery type.

Retrospective study of pregnant women with a prior cesarean section who delivered in a Portuguese hospital (Centro Hospitalar Barreiro-Montijo) between July/2017 and June/2018. Pregnant women with contraindication to vaginal delivery were excluded from this study. The data were collected from medical records. Statistical analysis was performed using RStudio Software. Our sample included 192 women aged between 19-48 years with a single previous cesarean section. This sample was divided in two groups according to the delivery type and risk factors were analyzed for each one. Odds Ratio (OR) was determined according to the cesarean delivery.

Regarding maternal age, women ≥35 years presented an OR of 1.56 (p<0.0146) for cesarean. Regarding weight, when comparing 2 groups with Body Mass Index (BMI) ≥35 Kg/m2 vs BMI <35 Kg/m2, OR was 1.76 (p<0.0119). Caucasian group compared to non-caucasian had an OR of 0.99 (p=0.6654). A vaginal delivery, before or after the previous cesarean, shown an OR of 0.06 (p<0.01591). Fetal-pelvic disproportion (FPD) as indication for the previous cesarean had an OR of 1.16 (p=0.7521) compared to others. Gestational Diabetes (GD) had an OR of 1.02 (p=0.9657) compared to the group with no complications. Delivery after 40 weeks of gestation had an OR of 0.68 (p=0.0209) compared to labour at earlier gestational ages. Newborn weight ≥3500g vs <3500g showed an OR of 1.30 (p=0.3750).

Age ≥35y and BMI ≥35Kg/m2 increased cesarean rate, which is supported by literature. Newborn weight ≥3500g and FPD as indication for the previous cesarean may be risk factors according to literature, however, in our sample values were not statistically significant. Race didn’t seem to influence delivery type. As opposed to most of published studies, vaginal delivery rate was higher >40 weeks. GD had no influence on delivery type. Previous vaginal delivery was a protective factor against a cesarean.

COI Disclosure: None declared
TOPIC: LABOUR IN SPECIFIC SITUATIONS

ID: 332

TITLE: OBSTETRIC AND PERINATAL OUTCOMES AMONG SUSPECTED AND NON-SUSPECTED SMALL FOR GESTATIONAL AGE (SGA) NEWBORNS.

AUTHORS: Roletti E., Di Pasquo E., Musetti J., Dall’Asta A., Franchi L., Fieni S., Ghi T., Frusca T

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CONTENT:
The aim of the present study is to compare obstetrical and perinatal outcomes of small for gestational age (SGA, birthweight <10th percentile) infants, according to their antenatal recognition.

This is a retrospective cohort study including all singleton pregnancies delivered in our tertiary care center between January and October 2018. SGA was defined on the basis of neonatal birthweight <10th percentile as data regarding maternal and fetal Doppler Velocimetry were not taken into account for the current analysis. SGA infants prenatally suspected (group A) were compared with non- suspected SGA (group B) and with controls (group C). Primary outcome of our study was mode of delivery. Secondary outcomes included: umbilical artery pH<7.1, APGAR score at 5th minute < 7 and NICU admission.

Incidence of SGA was 8.8% (170/1923), 66.4% of them were recognized after birth. Mean birth weight (2056±526 vs 2627±486) and birthweight percentile (3.9±2.4 vs 5.5±2.7) were significantly lower in group A compared to group B (p<0.001). Neonates with birthweight <3rdP were 42.1% in group A and 23.8% in group B (p=0.014). Elective CS was performed in 8.7% of women in Group A, while 61.4% of them underwent induction of labor. Higher incidence of emergency CS (36.8% vs 11% vs 14.9%) and NICU admission (26.3% vs 3.5% vs 3%) was reported in group A compared to other groups (p<0.0001). Rate of APGAR score<7 at 5 min was higher in group A compared to group C (4.2% vs 2.2% p=0.017). No differences in primary and secondary outcome between groups B and C.

Mode of delivery and neonatal outcomes did not differ between non-recognized SGA and controls. Antenatal suspicion of SGA was associated with higher incidence of birthweight <3rd percentile, lower mean birthweight and higher incidence of NICU admission. Finally, the higher risk of emergency CS reported in this latter group could be due to a policy of induction of labor, as SGA does not represent an indication for elective CS according to our local protocol.

COI Disclosure: None declared
A second cesarean delivery (CD) is one of the major contributors for the increasing CD rate. Vaginal birth after cesarean (VBAC) is controversial, although proven to be an effective measure to lower the CDs rate. VBAC is associated with fewer major complications and maternal and fetal morbidity, shorter recovery period, and high maternal satisfaction. Additional CDs are associated with higher risk of abnormal placentation, intraoperative injury, massive transfusion and unplanned hysterectomy.

To understand the success of a trial of labor after cesarean (TOLAC), we did a retrospective analyses which included the pregnant women with a previous CD, who had a childbirth in the Faro unit of the Centro Hospitalar e Universitário do Algarve in 2017. A total of 329 women were included. 53.50% had a cesarean section. Excluding elective CDs (for fetal malpresentation, maternal cause, 2 or more previous CDs, recent CD or previous uterine surgery) the CD rate was 39.29%, the success of TOLAC being 60.71%.

Among women with previous vaginal birth, 68.96% had a vaginal birth. Excluding elective CDs, this raises to 77.36%, previous vaginal birth being one of the main predictors of the success of a TOLAC. Considering the ones submitted to induction of labour, 53.66% had a CD. 37.38% of spontaneous labor group had a CD.

Considering women with previous CD for fetal or pregnancy reasons (excluding maternal and non-modifiable reasons as cephalo-pelvic disproportion), the CD rate was 37.5%. There weren’t any cases of uterine rupture.

With the increasing CD rate, the availability of TOLAC is essential to decrease morbidity associated with repeated CD. The discussion regarding mode of delivery should consider the woman’s obstetric future, risk factors and likelihood of success. Previous vaginal birth is the main predictor of success. Labor induction in associated with lower rates of VBAC. It could be studied whether it should be offered to all women with a previous CD, or if the likelihood of success should be considered.

COI Disclosure: None to declare.
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 6

TITLE: MATERNAL MORBIDITY AND MORTALITY IN ELSHATBY AND DAR ISMAIL MATERNITY HOSPITALS IN ALEXANDRIA: A COMPARATIVE STUDY

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CONTENT:
Pregnancy and childbirth are conditions that impact only women and may contribute to continued ill-health. The health of women during pregnancy and/or childbirth further impacts the health and development of the next generation and the well-being of the family, both economically and socially. Now, in the 21st century, approximately 60,000 women die of pregnancy-related causes each year, with the majority of these occurring in developing countries.

Methods: A cross-sectional survey was conducted to study women who gave birth in each of the hospitals. Then, a prospective survey of the women was conducted until the 42nd day after delivery. Data were gathered from women who delivered in addition to their caring obstetricians as well as reviewing their medical records. Additionally, records of maternal mortality were reviewed. All women who gave birth between January and April, 2014 (3 months) were included in the study to compare ElShatby University Maternity Hospital and Dar Ismail Public Hospital in regard to antenatal, natal, and postnatal morbidity and the causes of maternal mortality.

Two hundred and eighty women participated in the study (130 from ElShatby University Maternity Hospital and 150 from Dar Ismail Public Hospital). Significantly more rural women (29.2%) gave birth at ElShatby University Hospital than at Dar Ismail Public Hospital (16.7%), p=0.012. More than half of participants (51.8%) suffered from anemia during pregnancy. A minority (5%) of the women were diagnosed with preeclampsia at ElShatby Hospital. Cesarean section rate was significantly higher among women delivered at ElShatby University Hospital compared to Dartmail Hospital (61.5% versus 41.3%, p<001). The most common postnatal morbidity in the participants were postpartum hemorrhage (3.7%). The most common cause of maternal mortality was eclampsia.

Future studies are needed to identify and understand better the avoidable factors contributing to the relatively high rates of maternal morbidity and mortality in public hospitals. Such information will be of significant use in the processes related to providing quality services, ensuring accessibility of those services, and allocating corresponding resources aimed at reducing maternal morbidity and mortality.

COI Disclosure: none declared
TOPIC: MATERNAL MORBITDITIES & MORTALITY

ID: 8

TITLE: OBSTETRICS ANAL SPHINCTER INJURIES (OASI) – WHAT CHANGES CAN WE MAKE?

AUTHORS: M.Patel1; L. Long2

AFFILIATIONS: Obstetrics and Gynaecology
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CONTENT:
OASI is a major complication of vaginal birth, occurring in 2.9%1 of all vaginal births in England. The rates have tripled from 1.8% to 5.9%2 in primiparous having a vaginal delivery at term between 2000 and 2012. This may reflect improved detection and recording, or the differences in true rates between sites3. Even with timely repair, 20-40% of women have symptoms of incontinence or urgency 12 months after giving birth4-5. It is therefore important to find strategies to reduce our OASI rates.

A retrospective review of all cases of 3rd and 4th degree OASI between 1st January 2017 and 31st December 2017
All singleton pregnancies
Data collected from Badgernet (electronic maternity notes)
Data analysis with Excel

3605 vaginal deliveries, with 89 identified cases of OASI, incidence of 2.7%.
The range was 3-10 OASI/month with a mean of 7.4/month (Figure 1)
Rates of OASI with different modes of delivery were 8.4% with forceps, 1.69% with ventouse, 1.96% with SVD and 3.44% with breech (Figure 2).
93% OASI are 3a/3b/3c tears with 7% 4th degree tear.
The commonest delivery positions associated with OASI were lithotomy (37%) and semi-recumbent/sitting (25%) (Figure 3)
54% women had ‘hands on’ during delivery with 30% cases not recorded (Figure 4)
Highest risk of OASI was for primigravida, between 41-41+6 weeks having a forceps delivery.

Current rate is 3-10/month (mean=7.4/month)
Rates of OASI 8.4% with forceps, 1.69% with ventouse, 1.96% with SVD, 3.44% with breech
85% OASI are 3a/3b tears
Lithotomy = most common position to result in OASI
Highest risk in primigravida, 41-41+6 having forceps delivery
54% hands on, 16% hands off, 40% unknown
Need to improve our documentation
We need to improve our delivery techniques including perineal protection, episiotomy and examination post spontaneous and instrumental vaginal delivery.

COI Disclosure: None declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 17

TITLE: SERVICE REVIEW SECOND STAGE CESAREAN SECTION 2016-2017

AUTHORS: M. IDRIS; N. AL RASHY; M. ALLOUB

AFFILIATIONS: OBS/GYN DEPARTMENT, ALWAKRA HOSPITAL, ALWAKRA, QATAR

CONTENT:
The objective:
To determine differences in maternal and neonatal morbidity for women where a trial of instrumental vaginal delivery is conducted and followed by CS , compared to women who have immediate Cesarean section in the second stage.

Methods:
Retrospective review of all women delivered by Cesarean section in the second stage of labor, from January 2016 till December 2017 at OBS/GYN department, Alwakra Hospital.

Results:
3841 total CS, 240 were at full cervical dilatation. From 240, the instrumental delivery was attempted in 49 cases. From maternity side, our results showed that wound extension was 20% in trial of instrument group versus 12% in immediate CS group, PPH was 14% in trial of instrumental delivery group versus 10% from other group; blood transfusion was 12% versus 4%. From neonatal side, NICU admission was 38% in trial of instrument group, 14% in immediate CS group, Apgar scores of < 7 at 5 min, 6% in in trial of instrument group, 0% in immediate CS group, PH < 7.2, 22% in trial of instrument group, 8% in immediate CS group.

Conclusion:
We concluded that: The percentage of PPH, blood transfusion and extension are higher in cases of attempted instrumental trial. There is no percentage difference in terms of chorioamnionitis and wound infection between the two groups. The percentage of NICU admission, low PH and low APGAR are higher in cases of attempted instrumental trial.

COI Disclosure: None declared
Shoulder dystocia is an obstetric emergency that only in very rare cases can be anticipated. Most occur in the absence of risk factors. It happens in 0.2 to 3% of births. Uterine inversion is an extremely rare, life-threatening emergency that takes place when the uterus is turned partially or completely inside out. If not resolved quickly it can cause severe hemorrhage, hypovolemic shock, and death. Post-partum hemorrhage is a common obstetric emergency, following up to 5% of deliveries.

A 39+4 weeks pregnant woman was seen for premature rupture of membranes. It was her first pregnancy, following IVF treatment, with no incidences. Her hemoglobin was 11.1g/dL at admission. After 12 hours of spontaneous evolution, she was started on oxytocin, given ampicillin every 6 hours, and was administered epidural anesthesia. 12 hours later she was fully dilated to 10cm. After 1h and 10 minutes, the head was delivered and shoulder dystocia was resolved with the McRoberts maneuver and suprapubic pressure in less than 60 seconds. A healthy male was delivered, with an APGAR of 7/10 at 1 and 5 minutes, weighing 3640g, arterial pH of 7.12; with an asymmetry in the movements of the right upper extremity at a proximal level. Active management of the third stage of labor was performed using 5 units of oxytocin when the umbilical cord was cut. After 10 minutes, the placenta was partially delivered; the rest of it was manually extracted, encountering an incomplete uterine inversion. After achieving uterine relaxation, the uterus was manually repositioned. The ensuing atony was treated with uterine massage, carbetocin, and intrarectal misoprostol. The right mediolateral episiotomy was sutured without incidences. In the immediate puerperium, a temperature of 38.8°C was treated with a single dose of gentamycin. The patient’s hemoglobin the next morning was 8.1g/dL and she was treated with IV Fe. After 2 hours the newborn had normal and symmetric movements in both upper extremities.

Obstetric emergencies occur unexpectedly during labor and delivery. Midwives and obstetricians should be trained to recognize and handle these emergencies as efficiently as possible.

COI Disclosure: None declared.
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 42

TITLE: EXTERNAL CEPHALIC VERSION TRIALS AT OUT PATIENT DEPARTMENT

AUTHORS: Gwangjun K 1, Hana P 2

AFFILIATIONS: Obstetrics and Gynecology Dept. Chung-Ang university Hospital, Seoul, Korea

CONTENT:
External cephalic version (ECV) is known to have very low complication rate. Therefore, lately issued RCOG Guideline about ECV does not recommend preoperative preparations for caesarean sections anymore. However, most of clinicians and pregnant women with term breech presentation still have some degree of fear about ECV without any preparations. Our study aims to analyze the safety and success rate of ECV which have been done at out-patient department (OPD) without any preoperative preparations.

During 3 years study period, we had 543 term breech pregnancies. 34 cases were not suitable for ECV trial (multiple cord neck, severe IUGR, pre-eclamsia, anhydroamnios etc). 509 cases are included. Before ECV trial, USG examinations and direct bimanual palpations on the pelvis and the abdomen were performed. When the fetus seems to be in adequate situation for ECV (movable fetal buttock with a gentle pressure and soft maternal abdomen), a gentle short-term (less than 30 seconds) ECV was tried at the ultrasound room in OPD. When ECV fails, second ECV trial was performed the next day at labor unit with routine preparations of emergency operation. A specially designed medical sheet for ECV trial was used and reviewed retrospectively.

Mean gestational age of OPD ECV trials was 37.1 weeks of gestation. OPD ECV was successful on 139 cases (27.3%). (58 nulli-parous, 81 multi-parous). ECVs performed at labor unit were successful on 288 cases (56.6 %). Success rate of ECV was 83.9% in total. Mean time consumed for OPD ECV was 9.1 sec. Emergency cesaerean section was done in one case after successful OPD ECV due to vaginal bleeding and there were 7 cesaerean sections in ECV trials at labor unit. There was another case of vaginal spotting and 18 transient fetal bradycardias from OPD ECV trials. All were fully recovered without any sequales.

ECV trial at outpatient office without any preparation for emergency operation is a safe procedure with a decent success rate for term breech pregnancies.

COI Disclosure: I have no conflict of interest about this study.
TWIN GESTATIONS OUTCOMES IN OUR CENTER


AFFILIATIONS: Obstetrics and ginecology dept., Santa Lucia Universitary Hospital, Cartagena, Spain

CONTENT:
Twin gestations outcomes in our center, including the number of abortions and fetal loss, prematurity rate, the rate and indications of cesarean section and neonatal outcomes (income infants and neonatal deaths, if any).

A retrospective study including all twin gestations who performed the complete monitoring of pregnancy in our center between 2011 and 2015. electronic medical records to see the completion of gestation was used and perinatal outcomes of infants was performed. The data collected were: week end of pregnancy, mode of delivery (caesarean / vaginal delivery / caesarean birth 1st 2nd twin-twin), indication of cesarean if any, income infants, neonatal deaths.

We had a total of 192 twin pregnancies, of which 9 were miscarriages before week 24. 46% of births were premature, and 27% before week 34. 65% of cases ended in cesarean section, being most frequent indication of non-cephalic twin 1 (45%). 38% of infants required hospitalization in neonatology and perinatal deaths were 9 (2.5%).

Twinhood is a risk factor for prematurity and complications of pregnancy. In addition, the twin pregnancy has a higher risk of cesarean delivery for the mother, which affects the future reproductive life.

COI Disclosure: None declared
**TOPIC:** MATERNAL MORBIDITIES & MORTALITY

**ID:** 80

**TITLE:** THE ROLE OF THE “VERTICAL SANDWICH TECHNIQUE” (VST) FOR ABNORMAL INVASION OF THE PLACENTA OF THE CERVIX IN REDUCING POSTPARTUM HAEMORRHAGE AND PERIPARTUM HYSTERECTOMY.

**AUTHORS:** E. Chandraharan, A. Commare, A Pinas Carillo, R Hartopp, A. Bhide, J Moore

**AFFILIATIONS:** St George’s University Hospitals NHS Foundation Trust, London, United Kingdom

**CONTENT:**

Invasion of the placental tissue into the cervix, in cases of the ‘J-shaped’ [i.e. major anterior and posterior placenta praevia with abnormal invasion] poses a surgical challenge due to invasion of the cervical venous sinuses. Vertical Sandwich Technique involves insertion of the uterine tamponade balloon after myometrial excision and the application of two vertical compression sutures immediately above the balloon to ensure adequate tamponade of the bleeding cervical venous sinuses.

A retrospective study of 6 patients who had major anterior and posterior placenta with placenta percreta at the St George’s Regional Referral Service for Abnormal Invasion of the Placenta (AIP) were included in the study. After the myometrial excision during the Triple P Procedure, a ‘Bakri Balloon’ was inserted and the tubing was passed through the cervical canal into the vagina. The balloon was positioned within the cervical canal to ensure maximum pressure on the profusely bleeding cervical venous sinuses.. Two vertical compression sutures were applied immediately above the balloon to ensure maximum tamponade effect on the areas of cervical invasion to arrest haemorrhage. The balloon was removed after 12 hours.

The Vertical Sandwich Technique (VST), where the tamponade balloon is sandwiched between the vertical compression sutures and the cervical canal was associated with a median blood loss 1.8 L (interquartile range 0.475). No cases of injuries to the urinary bladder or ureters were noted. None of the patients underwent a peripartum hysterectomy.

VST appears to be a useful surgical adjunct in women with a major degree antero-posterior placenta praevia (i.e. J shaped placenta) with the invasion of the cervical venous sinuses during the Triple P Procedure. The ‘vertical’ sandwich technique which helps avoid the upward migration of the tamponade balloon appears to reduce the likelihood of massive obstetric haemorrhage (> 2 L) as well as peripartum hysterectomy, whilst avoiding injuries to the urinary tract.

**COI Disclosure:** None
Advances in obstetric and neonatal care contributed to a significant increase in the morbidity-free survival rate between 24 and 26 gestational weeks (GW). There has been an increase in the caesarean section (CS) rate at these gestational ages. Neonatal morbidity and mortality associated with these births has been extensively studied; however, it remains uncertain what is the impact over maternal health, particularly regarding the outcomes of a subsequent pregnancy.

This retrospective study reviewed births from January 2014 through June 2018 at a tertiary centre in Portugal. It included all deliveries by CS between 24 weeks and 25 weeks and 6 days. No exclusion criteria were applied. The centre has a no induction protocol in pregnancies subsequent to a CS. Variables related to maternal characteristics, pregnancy progression, a composite of perioperative/postpartum complications (uterine rupture, post-partum haemorrhage demanding blood transfusion, hysterectomy, thromboembolic or wound complication, and endometritis), were analyzed, from the extremely preterm delivery, as well as for subsequent pregnancies. The main aim of this study is to investigate the outcomes of those subsequent pregnancies.

In the index pregnancy, 15 deliveries meet the inclusion criteria. The birth occurred on average at 24 weeks and 6 days (24.0–25.6), with severe preeclampsia as the main indication [n=6 (40%)]. All CS were performed by transverse hysterotomy. There were no maternal deaths, but 3 (13.3%) of the women experienced at least one event of the morbidity compound. Four women had another delivery, with an average time interval of 17.5 months (12–25). Three of these pregnancies had no complications, with a CS scheduled at term due to previous CS. In the fourth case, the surgery had the same indication, but during spontaneous labour at 34 weeks. There were no maternal complications.

The maternal morbidity associated with CS before 26 GW was around 13%. However, it does not appear to have a significant impact on the outcomes of future pregnancies, suggesting that gestational age and uterine size at the time of surgery do not affect the risk of maternal complications, except for an increase in the caesarean rate.

COI Disclosure: None declared
The most important expectation of the mothers is having a safe childbirth; hence, the health care providers must plan for it as a priority. The prevention of 3rd and 4th-degree perineal tears is a challenge facing maternity care. Up to 57% of women with third or fourth degree perineal tears during childbirth suffer from anal symptoms which include faecal urgency, incontinence of flatus and stool. The aim of this study is to report a well-treated patient from our clinic with 4th degree perineal tears.

A 22-year-old primigravida with uncomplicated pregnancy admitted to our clinic with rupture of membranes occurred spontaneously at 37 weeks. Her initial examination revealed a cephalic presentation, with a soft cervix 4 cm dilated. She had spontaneously labor without induction or augmentation. Vaginal examination was performed 2 hour later than first examination. The patient was found to be 4 cm dilated, vertex -3. Within 3 h, the patient began involuntary bearing down and was found to be fully dilated, vertex +1 and rapidly advancing. Pushing was commenced. After crowning, the examiner noticed the damage of the perineal body. Total time in labor from contractions starting to delivery of the baby was 5h 20min. The patient sustained a 6 cm defect of the perineum between the vaginal orifice and the rectum was noted. This case was successfully repaired under general anesthesia with 2.0 polyglactin polyfilament synthetic absorbable suture in an overlapping technique to the external anal sphincter. We performed a simple interrupted suture technique for internal sphincter, perineal muscle and skin. Broad-spectrum antibiotics were administered to patient and high protein nutrition was given. She was discharged home well after 7 days, without symptoms of flatus or fecal incontinence on discharge. A review at 6 weeks post delivery in clinic revealed no abnormality in anal sphincter tone, an anatomically normal perineum and an asymptomatic patient with no fecal incontinence.

These injuries, if not recognised and repaired at the time, may have serious long-term consequences for women’s lives. If genital trauma is identified, a closer rectal examination should be done to ensure diagnosis and selection of treatment appropriate for the severity of the tear. A quick repair of these tears is important to minimise the risk of infection, blood loss, pain and incontinence, as well as long-term complications. Repair surgery is effective in eliminating symptoms for 60–80%.

COI Disclosure: None declared.
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 150

TITLE: EMERGENCY CAESAREAN DELIVERY AFTER EXTERNAL CEPHALIC VERSION

AUTHORS: A. Estefanía Díaz; I. Pedroarena Lecumberri; I. Zabaleta Loinaz; N. Abián Franco; J. Barrenetxea Arrinda; B. Gastón Moreno; M. Ruiz García; M. Bazán Legasa; J. Otaño Ruiz; C. Larrañaga Azcárate; M. García Mutiloa; M. Urtasun Murillo

AFFILIATIONS: Department of Obstetrics and Gynecology, Complejo Hospitalario de Navarra, Pamplona, Spain

CONTENT:
The external cephalic version (ECV) is the name for the manoeuvres that try transforming a non-cephalic presentation into a cephalic presentation, looking for lower rates of complications and higher rates of vaginal delivery. ECV is performed from 37 weeks of gestation, and results in a 60 percent reduction in non-cephalic presentation at birth. It is a safe procedure and the most frequent complications are minor, such as variations in the cardiotocography or self-limited vaginal bleeding.

A 40-year-old primiparous woman at 38+3 weeks’ gestation without medical history of interest. Well controlled pregnancy with a foetus in the 5th percentile of size, without Doppler changes. Frank breech presentation since 28 week. After administrating Ritodrine, the patient is taken to the operating room to try the ECV. After succeeding with the ECV while the fetal heart rate is being monitored, a considerable vaginal bleeding is detected. An ecography reveals a normal fetal heart rate of 110 bpm and a normally inserted placenta in the uterine fundus. The patient’s blood pressure starts lowering until 70/45mmHg. Due to the suspicion of a placental abruption, an emergent caesarean section is indicated with general anaesthesia, after explaining the indication to the patient. While performing the hysterotomy, many clots are detected coming from the placental insertion, confirming the diagnosis of placental abruption. The newborn is delivered in cephalic presentation using a forceps due to the high presentation of the fetus. A big retroplacental haematoma is found out after the delivery of the placenta. Carbetocin is administered after the delivery of the placenta, hysterorrhaphy is made, and an appropriate uterine contraction is checked. The pH of the umbilical cord is 7,00 for the artery and 7,10 for the vein. The Apgar scores 7 and 9 for the 1st and 5th minute respectively. Both the mother and the newborn have a successful recovery.

Even though the ECV is a safe procedure, it is not exempt from complications. Some of them can be grave and may entail a risk for both the mother and the newborn, requiring a caesarean section in some cases (0,35-2%) or causing fetal death in minor cases (0,02-0,8%). That is why we should always be prepared for any adverse event while doing the ECV. In addition, the guidelines recommend to carry out this technique in an operating room or close to it.

COI Disclosure: None declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 152

TITLE: MODIFIED TRIPLE P PROCEDURE FOR A CORNUAL PLACENTA PERCRETA

AUTHORS: A. Commare¹; A. Pinas²; J. Moore²; R. Hartopp²; E. Chandraharan²

AFFILIATIONS: 1. Department of Obstetrics & Gynaecology, St George's University Hospitals NHS Foundation Trust, London, UK - Obstetrics and Gynaecology Unit, University of Parma, Parma, Italy
2. Department of Obstetrics & Gynaecology, St George’s University Hospitals NHS Foundation Trust, London, UK

CONTENT:
The Triple P Procedure (peri-operative placental localisation, pelvic devascularisation and placental non-separation & myometrial excision) is a conservative surgical alternative to peripartum hysterectomy for abnormal invasion of the placenta. Modified Triple P Procedure involves achieving pelvic devascularisation by ligation of uterine arteries when the abnormal invasion of the placenta occurs in the upper uterine segment.

A 31 year old woman was transferred to the Regional Referral Service for Abnormal Invasion of the Placenta at St George’s Hospital, London, at 34 weeks of gestation with the diagnosis of placenta percreta at the site of previous surgical excision of cornual ectopic pregnancy (Figure 1). The pregnancy was otherwise uncomplicated. Delivery by Cesarean section and “Modified Triple P Procedure” were planned at 38 weeks of gestation. As the placenta was invading the upper uterine segment, considering its blood supply, a decision was made to avoid the placement of prophylactic occlusive balloon catheters in the internal iliac arteries as the second step of the Triple P Procedure. A peri-operative ultrasound scan with colour Doppler was performed to confirm the diagnosis and the site of placental attachment. The fetus was delivered beneath the lower border of the placenta without cutting through it. Bilateral uterine arteries ligation was carried out using the 110 mm needle, myometrial excision was performed at the site of cornual perforation of the placenta (Figure 2) and the myometrial defect was then repaired. The estimated blood loss was 750 ml. The patient made an uncomplicated post-operative recovery and was discharged three days after delivery.

Modified Triple P Procedure with the ligation of both uterine arteries may be used in cases with abnormal invasion of the placenta involving the upper uterine segment instead of placement of occlusive balloon catheters in the internal iliac arteries to avoid morbidity. This is because the neovascularisation from vesical, pudendal and vaginal arteries do not occur in the upper segment of the uterus, as the predominant blood supply to the area of abnormal placentation is from the uterine vessels.

COI Disclosure: None declared.
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 153

TITLE: REBOZO TECHNIQUE IN THE BREECH PRESENTATION: PROMOTE CEPHALIC VERSION AND REDUCE CESAREAN DELIVERY

AUTHORS: S. Biondi 1, MC Alvisi 2, M Ferrara 3, B Zavelle 4

AFFILIATIONS: M. BUFALINI HOSPITAL, CESENA, ITALY
INFERMI HOSPITAL, RIMINI, ITALY

CONTENT:
Breech presentation affects 3-4% of pregnancies at term. ECV (external cephalic version) is an effective intervention to decrease the cesarean delivery from 37 EG. This study aimed to estimate the effectiveness of Rebozo technique for version of breech presentation to reduce the cesarean delivery. This multicenter RCT study started in 2017 at Hospital Bufalini, in Cesena and at Hospital Infermi, in Rimini and progress now.

We included 37 women in gestational week 34 with non-vertex single fetal position using the same exclusion criteria of ECV. They were randomised to Rebozo technique plus home postural therapy (conventional treatment) or control without Rebozo for three weeks before the ECV. The Rebozo treatment was performed once a week until 37 gestational week or until the version of breech presentation.

Cephalic version with vaginal delivery (VD) was obtained in 77.8% of the women treated with rebozo (GA) versus 10.5% of the group with postural therapy (GB). Breech presentation with caesarean section (CS) was obtained in 22.2% of the GA versus 89.5% of the GB.

(test ch2= p< 0.001).

A preliminary analysis of the research, that is not yet concluded, shows positive results.

COI Disclosure: none declared
Incisional hernia is one of the common complications of abdominal surgery. It mostly occurs within a few months of surgery but can develop as late as ten years afterwards. Current data show that midline laparotomy has the highest incisional hernia incidence (3-20%) compared to Pfannestiel incision (1%). We conducted a study to examine the incidence of incisional hernia post caesareans in a district general hospital (within East Kent NHS Trust) and to identify any potential risk factors.

We identified and reviewed all cases of incisional hernia post caesarean sections (n=18) retrospectively during the years 2011 to 2014. 3731 Caesarean sections were performed in total which included elective and emergency caesarean sections. The inclusion criteria were all Caesarean sections within East Kent Trust and exclusion criteria were women having sepsis at the time of Caesarean section. The notes were analysed on a Microsoft Excel spreadsheet and percentage non-parametric tests were undertaken for statistical purposes.

The local incidence of incisional hernia post caesarean section was 0.48%. Fifteen out of Eighteen (83%) patients had BMI >25 and twelve patients (66.7%) had BMI >30. All Eighteen patients received Vicryl 1 sutures for rectus sheath closure.

Other associated factors identified were emergency caesarian section (33%), previous surgeries, Post partum haemorrhage>1000ml (22%) and wound infections (1%). These patients tended to have other co-morbidities including smoking (22%), asthma (11%) and type 2 diabetes (11%) which likely increases the incidence of incisional hernias due to post-operative infections and pulmonary complications.

The incidence of incisional hernia in our cohort is within the limits of other reported incidences in literature. We noted that almost all patients had one or more risk factors for developing post-operative complications. We therefore propose using slower absorbed monofilament sutures such as PDS for rectus sheath closure in patients with one or more risk factors.

COI Disclosure: None
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 168

TITLE: DELAYED POST-PARTUM HEMORRHAGE SECONDARY TO INFECTION – CASE REPORT

AUTHORS: I Gouveia 1; C Soares 1; J Silva 1; A Quintas 1; M Melo 1; M Novais 1; A Nogueira 1; C Carvalho 1

AFFILIATIONS: 1. GYNECOLOGY AND OBSTETRICS SERVICE OF V.N.GAIA/ESPINHO HOSPITAL CENTRE, Vila Nova de Gaia, Portugal

CONTENT:
Post-partum haemorrhage remains one of the most prevalent causes of maternal mortality and morbidity worldwide. It is subdivided in early post-partum haemorrhage when bleeding occurs in the first 24 hours after delivery (up to 5%) and delayed when it takes place from 24 hours to 12 weeks (only 0.2 to 2%).

30-year-old woman, gravida 2 para 1, admitted at 41 weeks of gestation with premature rupture of membranes. Submitted to cesarean due to failure of progression during the first stage of labour, after 22 hours of active phase duration. Prolonged rupture of membranes (26 hours), without intrapartum fever. Transverse hysterotomy incision was complicated with lateral laceration of the uterine wall, fixed during the uterine closure. Post-partum haemoglobin levels were 9.6 g/dL.

Admitted with heavy vaginal bleeding on the 15th day post-caesarean. Initial examination: stable, afebrile; uterine atony and bleeding confirmed on gynaecological exam; intracavitary content of 15 millimetres in vaginal ultrasound. Haemoglobin levels were 9.9 g/dL.

Submitted to suction curettage, followed by oxytocin and misoprostol administration. Important bleeding persisted with signs of impending hypovolemic shock. Other conservative measures such as sulprostone, tranexamic acid and Bakri Balloon were employed according to our Unit’s protocol. Haemoglobin levels were 3.3 g/dL.

Massive blood products´ transfusion and a total hysterectomy with ovarian preservation were performed. During surgery, it was verified the presence of pus in the abdominal wall. Enterococcus faecalis was isolated. After surgery, the patient was transferred to Intensive Care Unit, with favourable evolution.

Post-partum hemorrhage is an obstetric emergency. The prompt institution of sequential non operative measures is essential to avoid profuse bleeding and consumption coagulation disorder. Patients refractory to uterotonics drugs and uterine curettage can be selected to arterial embolization. If not available or unsuccessful, hysterectomy ought to be performed and should not be delayed. A multidisciplinary team with coordination between different medical specialities is essential in all cases.

COI Disclosure: None declared
The maternal mortality rate (MMR) is calculated per 100,000 live births, and is important for the verification of the quality of prenatal care including women’s health care in their puerperal pregnancy cycle. This is critical as many maternal deaths can be prevented by good quality care during this cycle. The three most common causes of maternal mortality are: haemorrhaging, infection, and hypertension.

This work aims to verify the MMR and identify the causes of death of these women. This is a cross-sectional, retrospective study which uses data from the Mortality Information System (SIM) and the Information System on Live Births (Sinasc) from the Secretary of State for Health of the Federal District (DF), from 2007 to 2016.

In 2016, DF had an MMR of 48.6, up from 38.6 in 2007, an increase of 10 deaths per 100,000. In DF, the vast majority of maternal deaths (72%) occurred in public hospitals. Direct obstetric causes accounted for more than 50% of maternal deaths in the same period. Furthermore, in 2016, the proportion of maternal deaths due to direct obstetric causes was 81%. Worryingly, DF has the highest rate of maternal mortality due to the termination of pregnancy through abortion. There were 23 deaths in this group: eight due to ectopic pregnancy, and fifteen due to complications of abortion or attempted abortion.

In 2016, the percentage of maternal deaths without information regarding the gestational trimester of prenatal care increased, indicating the need to improve the epidemiological investigation of these cases. With better prenatal care, we can reduce the Maternal Mortality Ratio.

COI Disclosure: NENHUM DECLARADO
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 188

TITLE: ISTHMICH PREGNANCY AND COMPLICATIONS ACCORDING TO A CASE, FROM THE BEGINNING TO THE END

AUTHORS: J. Barrenetxea; B. Gastón; M. Ruíz; M. Bazán; J. Otaño; A. Estefanía; I. Pedroarena; I.Zabaleta; N. Abián; C. Larrañaga

AFFILIATIONS: Complejo Hospitalario de Navarra, Pamplona, Spain

CONTENT:
Cervical pregnancy is a rare form of ectopic pregnancy in which the pregnancy implants in the lining of the endocervical canal. The incidence of ectopic pregnancies is 1 in 9000 pregnancies (less than 1% of all ectopic pregnancies) and the cause is unknown. Most common symptom is bleeding which can be profuse and painless. It is important to check by ultrasound that the gestational sac is located in the cervix and cardiac activity should be seen in the embryo to distinguish it from an abortion.

Our case is a 35 years old woman who went to hospital emergencies because of abdominal pain at 6+4 weeks of gestational age. It was her first pregnancy. During the exploration a poly myomatous uterus was described, with several big dimension myomas. A gestational sac located in the lower uterine segment very close to the cervix was described, and a cervical pregnancy was suspected (cardiac activity was positive in the embryo). Images were taken into an obstetrical committee and the diagnosis of cervical pregnancy was dismissed. It was a segmental located pregnancy.

Due to higher risk of cervical incompetence the pregnancy was controlled in the high risk pregnancies unit. In the 16 week of gestational age a cervicometry was performed and the length of the cervix was 7mm, and it was partly opened. A cerclage was performed. During the pregnancy use of tocolytics was needed in the 27 and 28 weeks due to uterine contractions.

A caesarean section was performed due to breech presentation at 37+6 gestational weeks. Fetal extraction was performed with no incidence after a low uterine segment transverse incision. After fetal extraction a very distented uterine segment was described, with a form of an hourglass shaped uterus, and that part of the uterus presented hipotony that was not getting better after use of Carbetocine and Misoprostol, so a intrauterine balloon was placed. After the balloon was correctly inflated, bleeding stopped, and suitable uterine contraction was achieved.

Low segment uterine pregnancies tend to occur after previous cesarean sections but can occur even if there is no risk factors such as a previous uterine intervention or prior pregnancies. Appropriate clinical suspicion is important, and a correct differential diagnosis must be done, mostly with a cervical pregnancy. A segmental located pregnancy is a high risk one due to complications that are more common such as cervical incompetence, preterm labour and higher risk of uterine atony.

COI Disclosure: None declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 207

TITLE: EFFECTS OF A SELECTIVE USE OF THE EPISIOTOMY IN THE NORMAL DELIVERY IN AN UNIVERSITY HOSPITAL

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AFFILIATIONS: 1 Obstetrics Dept., University Hospital of Basurto, Bilbao, Spain

CONTENT:
Midwives from the Obstetrics and Gynecology Service in Basurto University Hospital (Bilbao, Basque Country), decided to promote a policy of selective episiotomy and the aim of this study is to determine the effects of a selective use of episiotomy and its relation to perineal tears, in the normal birth attended by midwives since 2013 to 2017 in an University Hospital.

We have analyzed the episiotomy rates in the normal births occurred between 2013 and 2017, and the information about all type of lacerations in these deliveries. Data source was the birth log at the Service. Data were tabulated using Microsoft Office Excel 2016 software.

In 2013 the total number of births in the hospital was 2205, 86.49% vaginal deliveries and 65.63% normal births. The quantity of births has remained stable (in 2017, 2312 births). The rate of normal births has oscillated between 68.02% (in 2016) and 63.48% (in 2014). From 2013 to 2017 the episiotomy rate in the normal birth has decreased from 21.03% to 9.88%, with an increase of first degree lacerations (from 16.2% in 2013 to 28.47% in 2017) and, in second degree lacerations rates from 19.74% until 34.87% in 2017. The rate of women with intact perineum in the last two years has remained stable. Severe perineal tears rate has stayed in similar quantity around 1% of the total normal births in 2016 and 2017.

In 2017 using a policy of selective episiotomy, the rate in our population has been 9.88%, without an increase of the risk of severe perineal tears (routine episiotomy doesn’t reduce severe perineal trauma and this believing is not justified by current evidence). For the future, used of warm compresses during the second stage of labor is one of the techniques which is recommended, and we are studying the start up.

COI Disclosure: None declared
Gestational diabetes (GDM) and obesity are both independent risk factors for adverse obstetric outcome and are often associated. Obesity represents a great challenge in obstetric care because of its increasing prevalence in childbirth age and its potential adverse impact on both mother and fetus during and beyond pregnancy.

The aim of our study is to assess, in a large cohort of women with GDM, the risk of maternal and perinatal complication and their relationship with pre-pregnancy BMI.

We performed a retrospective analysis including singleton pregnancy with GDM who delivered at our Department between 2009 and 2016. Data on maternal and neonatal outcomes and mode of delivery were collected and compared according to pre-pregnancy BMI lower or greater than 30 Kg/m². GDM was diagnosed according to NDDG guidelines until 3/2010 and to IADPSG recommendations afterwards. Women were managed according to our clinical protocol: pharmacological therapy with metformin (and eventually insulin) was started if glycemic target was not achieved with diet alone. Labour induction was performed at 41 weeks in case of good glycemic control, normal fetal growth and no need of pharmacological therapy; otherwise it was performed at 38-39 weeks.

1563 patients with GDM were included: 1244 with pregestational BMI< 30 (mean 24.1 ± 3.1) and 319 obese women (mean BMI 34.6 ± 4.1; p<0.001). Maternal age and parity were similar in the two groups. Table 1 summarizes the results. Obese patients had earlier diagnosis of GDM, increased need of pharmacological therapy and higher comorbidity (especially hypertensive disorders). Delivery mode was statistically different with a higher labour induction and caesarean section rate in obese group. Large for gestational age infants were more frequent in obese patients; neonatal adverse composite outcome [Neonatal Intensive Care Unit admission, jaundice, hypoglycemia or Respiratory Distress Syndrome] was significantly increased in this population.

In our population obese women with GDM had a higher incidence of adverse outcome, in particular hypertensive disorders, caesarean section rate and NICU admission. Therefore these patients should be treated with an additional consideration, planning adequate nutritional intake in order to gain weight within the limit recommended by the IOM guidelines, according to pre-pregnancy BMI. The strength of our study is the sample size of the population, while the retrospective nature represents a limit.

COI Disclosure: non declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 213

TITLE: EMERGENCY CERCLAGE – A RETROSPECTIVE REVIEW IN A TERTIARY HOSPITAL IN SINGAPORE

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CONTENT:

Preterm births, defined as less than 37 weeks of gestation, remains to be one of the major complications in pregnancy. The use of an emergency cerclage may delay the delivery, reduce the chance of delivery before 34 weeks of gestation and potentially improving the maternal and fetal morbidity and mortality rate. The objective of this study is to review the maternal and fetal outcomes of all emergency cervical cerclages done at KK Women’s and Children’s Hospital (KKH), Singapore.

KKH is the largest tertiary hospital in Singapore. This is a retrospective review of all 60 patients who had undergone emergency cervical cerclage in KKH from December 2006 to December 2016. Maternal demographics, obstetric history, risk factors for cervical incompetence including history of previous cervical trauma and mid-trimester miscarriages were collected. Delivery outcomes such as gestational age at delivery, mode of delivery, microbiology testing and neonatal outcomes such as birth weight, Apgar scores, need for neonatal intensive care unit stay were also collected. The main outcome was the latency period from time of cerclage to time of delivery.

The mean age was 32.4 years old(±4.28).43 patients(71.7%) were multiparous;5(8.3%) had a history of preterm birth, 2(3.3%) had previous cerclage,15(25.0%) had second trimester miscarriages.The mean gestational age(GA) at cerclage was 20.8 weeks(±3.1).The mean cervical dilatation was 2.2cm (±1.3).There was one case of failed cerclage at 23.3 weeks.The mean latency period was 10.6 weeks(±7.2).Nine women miscarried after the cerclage.The mean GA at delivery was 31.4 weeks(±6.8).The mean birthweight was 1869.9kg(±1161.2).19 (32.3%) neonates required neonatal intensive care unit admission. 24 neonates and 12 neonates had Apgar score of less than 7 at 0 and 5 minutes respectively.

Our study showed that emergency cervical cerclage increased the latency period from time of cerclage insertion to time of delivery and was associated with favourable pregnancy outcomes. It adds to the growing body of evidence regarding emergency cervical cerclage. The results can also be used for counselling of our patients in the local setting.

COI Disclosure: None declared.
RISK OF ADVERSE PREGNANCY OUTCOMES BY PRE-PREGNANCY BODY MASS INDEX AMONG ITALIAN POPULATION: A RETROSPECTIVE POPULATION-BASED COHORT STUDY ON 30 853 DELIVERIES.

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CONTENT:
Several studies addressed the influence of maternal pre-pregnancy weight on pregnancy outcome. Potential benefits of pre-pregnancy weight reduction on maternal and perinatal outcomes have not been studied properly. The aim of the present study was to examine pregnancy outcomes in obese and overweight North-Italian women and evaluate the adjusted risk of adverse maternal and neonatal outcomes as a function of increasing pre-pregnancy BMI.

Data, related to all women who delivered at the Department of Obstetrics and Gynecology of Sant’Anna Hospital, in Turin, between 2011-2015, were collected retrospectively from the hospital database. According to BMI, women were considered as normal weight, overweight, and class 1, 2 and 3 obese (WHO criteria). Logistic regression analysis was used to study the potential impact of BMI on maternal and neonatal outcomes, adjusting the results for maternal age and parity. Adjusted absolute risks of each considered outcome were reported according to incremental values in pre-pregnancy BMI.

A total of 27,807 women were included. 75.8% were normal-weight women, 16.7% were overweight women, and 7.5% obese women. A 10% difference in pre-pregnancy BMI was associated with gestational diabetes mellitus, preeclampsia, maternal admission to Intensive Care Unit, macrosomia, APGAR 5'≤6 and neonatal admission to Intensive Care Unit with a reduction of at least 15%. Gestational diabetes mellitus and preeclampsia resulted in the highest difference being almost 30%. Larger differences in BMI (20-25%) corresponded to at least a 10% in reduction of risk of preterm and very preterm delivery and emergency cesarean section. Differences in maternal pre-pregnancy BMI had no impact on shoulder dystocia and stillbirth.

Results of the present study offer a quantitative estimation of the negative impact of pre-pregnancy obesity on the most common pregnancy and perinatal complications. This could represent a useful tool in counselling overweight/obese women looking for pregnancy.

COI Disclosure: None declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 245

TITLE: COMPLEX UROGENITAL, VERTEBRAL AND LOWER GASTROINTESTINAL TRACT MALFORMATIONS ASSOCIATED WITH A RETROPERITONEAL 21 WEEKS PREGNANCY – A CASE REPORT

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CONTENT:
The group of vertebral-anorectal-renal anomalies identified in certain patients exhibits one potential VACTERL spectrum. The association with class IV mullerian anomalies widens the clinical phenotypic heterogeneity and rises concerns in term of fertility rate and obstetrical outcomes. We aim to present the first case of a vertebral-anorectal-renal anomaly association in a 21 weeks pregnancy obtained spontaneously in a woman with distal vaginal atresia and complete bicornuate uterus.

An 18-years-old woman, gravida 0, para 0, with a history of 5 month amenorrhea was admitted by transfer from a 2nd degree territorial medical unit via the Emergency department of our institution on 24.09.2017 in a post exploratory laparotomy status with altered general condition, with the main complaint of abdominal pain. The patient’s medical and gynecologic history revealed the presence of a complex vertebral, lower gastrointestinal tract and urogenital malformation association comprising of scoliosis, anal atresia as well as malposition of the right kidney, rudimental labia, distal vaginal atresia and complete bicornuate uterus, for which the patient underwent multiple surgical procedures of vaginoplasty and anoplasty. The patient was stable at the moment of the admission in our clinic. CT exam confirmed the association of vertebral-anorectal-renal and mullerian anomalies and showed a retroperitoneal 21 weeks dead fetus. Emergency laparotomy performed in our department revealed enlarged right and left hemiuterus with no gestational sac present in any uterine cavity after histerotomy. Total histerectomy of the left hemiuterus and left adnexectomy are performed. The presence of the retroperitoneal macerated fetus along with the placenta were identified at the opening of the vagina; both were removed and sent to hystopathological examination. Postoperative evolution of the patient was favourable and 7 days later the discharge documentation was made.

Identification of mullerian anomalies should grant clinicians with a high index of suspicion for other associated urinary or gastrointestinal malformations. Despite favourable results in reconstructive surgery, urogenital anomalies remain meaningful obstetrical challenges, their therapeutic management becoming increasingly controversial. Pregnancy outcome and maternal morbidity are severely impaired in cases of complex genital malformations associated with other structural anomalies.

COI Disclosure: None declared
Type 1 and type 2 diabetes mellitus in pregnant women is associated with complications for both mother and newborn. Objective of this study is to analyse the association between maternal and fetal short-term outcomes and glycemic control during pregnancy. Outcomes analysed are the mode of delivery, the incidence of induction of labour, preeclampsia, LGA babies (weight > 90° percentile), preterm birth, intrauterine death, hypoglycemia and respiratory distress syndrome of the newborn.

We analysed a population of singleton pregnancies with type 1 and type 2 diabetes mellitus ("Diabetes and Pregnancy", Sant’Anna Hospital, Turin). Maternal outcomes analysed were the mode of delivery (spontaneous vaginal delivery, vaginal assisted delivery and caesarean section), the incidence of induction of labour and preeclampsia; fetal outcomes were preterm birth, birth weight > 90° percentile (LGA), hypoglycemia, respiratory distress syndrome, intrauterine death.

Each outcome was associated with glycemic control during pregnancy, using HbA1c preconceptional value and of the first, second and third trimester of pregnancy (cut-off value 6.5% = 48 mmol/mol). P < 0.05 was deemed statistically significant.

135 patients were involved in the study. The medium gestational age at delivery was 36.3 weeks +/- 1.4. High values of pre-conceptional HbA1c were associated with a higher incidence of LGA babies (37.5% vs 10%, p < 0.001); high values of HbA1c in first and second trimester of pregnancy with a higher incidence of LGA babies (43.6% vs 17.6%, p < 0.05 and 73% vs 20%, p < 0.001) and caesarean section (58.9% vs 44% and 61% vs 41%, p < 0.05). High values of HbA1c in third trimester were associated with a higher incidence of LGA babies (56.6% vs 16.6%, p < 0.05).

No significant association was observed between HbA1c values and other maternal and fetal outcomes analysed.

HbA1c values > 6.5% (48 mmol/mol), especially in the second trimester of pregnancy, are associated to a higher incidence of LGA babies in women with type 1 and type 2 diabetes mellitus. Further analysis are needed to clarify if pre-prandial, post-prandial glycemic values, media or mediana of glycemic values are more predictive of maternal and fetal complications in women with type 1 and type 2 diabetes mellitus.

COI Disclosure: None declared
Peripartum cardiomyopathy (PPCM) is a rare cause of heart failure (HF) that affects women mainly in late pregnancy or in the early puerperium. Despite many attempts to uncover a distinct etiology of PPCM, the cause remains unknown and may be multifactorial. PPCM may develop as a result of an interaction between pregnancy-related factors and a susceptible genetic background.

A 36-year-old primigravid of in vitro fertilization bichorionic twins was admitted after preterm premature rupture of membranes at 34+0 weeks. Corticosteroid fetal lung maturation and antibiotic prophylaxis was started. Two days later, with no clinical or laboratory signs of infection, she complains of dry cough and progressive dyspnea after several vomiting episodes. Oxygen saturation was 89%. Chest X-ray showed total lung opacification. The Angio-CT showed bilateral opacity of the lower lobes and evidence of pleural and pericardial effusion. The echocardiogram revealed a global reduction in left ventricle (LV) systolic function (LV ejection fraction of 45-50%), a non-dilated LV and a dilated and hypokinetic right ventricle. Hemodynamic instability with refractory hypotension and refractory hypoxemia led to the decision to perform an emergency cesarean section. The patient was then admitted to the intensive care unit (ICU) with respiratory and cardiovascular dysfunction, needing aminergic support and non-invasive mechanic respiratory support. After four days, she showed remarkable clinical and imagiological improvement and was discharged home with antihypertensive and rhythm control medication. Clinical and imagiological follow-up after one month showed no signs of cardiac or lung dysfunction.

PPCM is a diagnosis of exclusion. For women with peripartum cardiomyopathy who have delivered, acute HF is managed using standard therapy. The mortality rate for PPCM has been reported as approximately 10% in the first two years after delivery. Up to 20-60% of patients with peripartum cardiomyopathy will achieve full recovery of LV function (LV ejection fraction >50%); nearly all recovery of LV function occurs within six months of diagnosis.

COI Disclosure: None declared
MORBIDLY ADHERENT PLACENTA (MAP) AND PLACENTA PREVIA: SURGICAL APPROACHES

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CONTENT:
Morbidly adherent placenta (MAP) is defined as a placenta's abnormal adherence to the uterine wall. It is classified into placenta accreta, placenta increta and placenta percreta. The incidence of MAP has increased over the past 50 years, secondary to the increase of cesarean deliveries. A risk factor for MAP is placenta previa. Standard management of MAP is an elective caesarean hysterectomy. A conservative approach may be undertaken.

We conducted a retrospective study at the Obstetrics Department 2U in Sant’Anna Hospital of Turin between 01/2015 and 12/2017. We analyzed the outcomes of 48 women with central or marginal placenta previa who underwent an elective C-section between 35 and 36 weeks. 11 women had a preoperative or an intraoperative diagnosis of MAP. We evaluated the outcomes of 11 women diagnosed with MAP: conservative or demolitive management and blood loss.

We found 3 women treated with hysterectomy: one performed immediately after C-section due to uncontrolled blood loss; one performed 2 hours after C-section for persistent blood loss and one performed immediately after C-section being the third one with no further desire for offspring; 8 women were treated with a conservative management: 2 with placement of a bakri balloon and 6 with Cho haemostatic suture and contemporary positioning of Bakri balloon with excellent bleeding control. In the hysterectomy group the medium blood loss was 5200 ml and we observed a higher rate of admission in the intensive care unit. In the conservative group the medium blood loss was 1830 ml.

Our data demonstrate that in selected postpartum hemorrhage cases with MAP, the use of hemostatic sutures combined to the placement of Bakri balloon can avoid hysterectomy, with improvement in maternal outcome.

COI Disclosure: None declared
The introduction of oocyte donation (OD) has allowed a successful pregnancy also in advanced maternal age (AMA) women. However, all OD pregnancies have a higher risk of antepartum and peripartum complications, including postpartum haemorrhage (PPH), which stands as the main worldwide cause of maternal mortality.

A retrospective study was conducted on pregnancies achieved from OD who gave birth at Careggi Hospital from Jan. 2016 to Sept. 2018, evaluating the risk factors for severe PPH (>1000 cc). The variables evaluated were: very AMA (>45 years), parity, body mass index (BMI) >30, use of aspirin and low molecular weight heparin (LMWH), diabetes mellitus type I and II (DM), obstetric complications such as gestational diabetes (GDM), hypertensive disorders of pregnancy (HDP), estimated fetal weight (EFW) in the III trimester >90° centile, polyhydramnios, induction of labor, elective or urgent caesarean section (CS), preterm birth (PTB). Presence of uterine fibroids (UF) and adenomyosis diagnosed pre-in-vitro fertilization by 2D-3D ultrasound, according to MUSA criteria.

The group included 89 OD pregnancies. The mean age was 43.9±4.7 with 43.8% of VAMA. Severe PPH occurred in 11 cases (12.4%). 27.3% of OD complicated by severe HPP were nulliparous and none was obese. 4.4% used aspirin in pregnancy and 14.8% LMWH. DM was present in 12.6%, GDM in 8.7%, HDP in 5.3%, EFW >90° centile in 14.3% and polyhydramnios in 42.9%, PTB occurred in 16.7%. Ultrasound identified UF in 27.3% cases, while adenomyosis in 18.5%. Induction of labor was performed in 13.8% and CS represented the main mode of delivery (52.8% of elective CS and 28.1% of urgent CS), with a percentage of PPH in elective CS of 12.6% and 4% in urgent ones. The only conditions that were significantly associated with PPH were: aspirin use, polyhydramnios and adenomyosis.

Most women who are undergoing OD are in advanced age, an high risk population of obstetric complications, such PPH. In case of adenomyosis an accurate counselling could be offered prior to fertility treatment and the development of polyhydramnios should require personalized care and perinatal planning.

COI Disclosure: All Authors declare no conflict of interest
TOPIC: MATERNAL MORBITIDES & MORTALITY

ID: 287

TITLE: HEALTH SERVICES IN TURKEY: "EVALUATION OF THE NEWBORN HEALTH"

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AFFILIATIONS: Ege University Faculty Of Health Science

CONTENT:
Studies in recent years show that our country is experiencing a significant decline in both under-five mortality and neonatal mortality rates. According to United Nations sources, Turkey has taken its place among the sample countries in reducing maternal and infant mortality. The infant mortality rate in Turkey between the years 1993-2016 showed a decline from 53 to 7.3. This has been the effect of improving quality of service for mother and child health.

One of the most basic indicators in this improvement is the increase in the number of health personnel. According to the data of the year 2016 (TUIK), it is seen that there has been a significant increase in the number of health personnel in the last 50 years. The number of physicians, nurses and midwives in the 7000s in the 1970s increased by an average of 10 times in 2016. At the same time, with the increase of the health personnel in our country, the number of beds in the inpatient treatment institutions also increased. In 2016, the number of newborn intensive care beds was reported as 10,939.

Another important initiative in the prevention of infant mortality is vaccination. According to the TNSA 2013 data of our country, the rate of full-blown children is 74.1%. Over the past 20 years, the rate of full-blown children has increased 1.6. Another initiative to encourage the reduction of newborn deaths and breastfeeding is the “Baby Friendly Neonatal Intensive Care” which started in 2013. In our country, the number of Baby Friendly Neonatal Intensive Care has increased to 35 in 2017.

As a result, newborn deaths affecting the rate of “two-thirds reduction in mortality among young children under five years” has been significantly reduced in our country by increasing the number of newborn care standards, newborn intensive care and health professionals.

COI Disclosure: None declared
Postpartum fever is defined as an oral temperature ≥38.0°C (100.4°F) on any two of the first 10 days postpartum, exclusive of the first 24 hours. The differential diagnosis includes surgical site infection, endometritis, mastitis, urinary tract infection and septic pelvic thrombophlebitis among others. Perineal infections of previously repaired lacerations or episiotomies, are usually localized to the skin and subcutaneous tissue. The area appears swollen and erythematous with a purulent exudate.

33 years old patient with a 32 BMI and one previous cesarean section. She was admitted with spontaneous labor at term, having an eutocic delivery. A 3225 grams baby boy was born with an Apgar of 9/10. A II degree tear (Sultan Classification) stitched in with double points without episiotomy. 24 hours after delivery she presented a febrile peak and tachycardia. A complete physical examination is performed without source of infection. Perineal, blood and urine culture were taken and a laboratory showed leukocytosis with left deviation, elevation of CRP and negative procalcitonin. Empirical intravenous antibiotic therapy was initiated. 48 hours after delivery she had a new febrile peak of up to 39.4°C with hypotension, tachycardia and increased leukocytosis, elevated CRP, procalcitonin, and alteration of coagulation times. She was diagnosed septic shock and referred to the intensive care unit, in which the antibiotic coverage was extended. We decided to perform revision of the birth canal in the operating room because of a new febrile peak on the fourth day of puerperium. Debridement of necrotic material was performed, with opening of left paravaginal abscess of about 10 cm. The subsequent evolution of the patient was satisfactory, without new febrile peaks after surgery. Antibiotics are maintained for a week. The result of the perineal cultures and the blood culture is positive for Streptococcus pyogenes (group A).

Group A Streptococcus can cause invasive infections in the form of endometritis, necrotizing fasciitis, or toxic shock syndrome, including areas such as uterus, vagina, and external genitalia. Patients with group A Streptococcus puerperal sepsis typically present with fever (greater than 38.5°C within the first 48 hours postpartum) and abdominal pain. Hypotension, tachycardia, and leukocytosis are signs of developing streptococcal toxic shock syndrome and are associated with higher mortality.

COI Disclosure: None declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 307

TITLE: SUCCESSFUL PREGNANCY COURSE IN A PATIENT WITH FOWLER SYNDROME TREATED BY SACRAL NEUROMODULATION


AFFILIATIONS: Obstetric Department, Completo Hospitalario de Navarra, Pamplona, Spain

CONTENT:
Fowler’s syndrome is a cause of urinary retention in 20 to 30-year-old-women. It is characterized by urinary retention secondary to failure of the urethral sphincter to relax to allow urine to be passed normally. Typically, the patient is in her second or third decade. The condition can arise spontaneously, after any surgery or following childbirth. The most effective treatment for urinary retention in Fowler’s syndrome is unilateral sacral neuromodulation.

A 34-year-old patient with Fowler’s syndrome who undergoes her first pregnancy. As a result of a traffic accident, she has a cervical arthrodesis and urethra-sphincter dyssynergy treated by sacral nerve stimulation. She also suffers from anxiety and alimentary disorder. Based on the bibliography, it was decided to maintain the sacral neurostimulator switched on during the pregnancy but not during delivery. Neither remarkable complication occurred during the pregnancy course nor recurrent urinary infections. The patient followed a good control of her condition until week 36 she attended to the emergency room referring and intense pain on the left gluteus, where the neuroestimulator was localized. Fortunately, no infection or other complication except for a nervous pressing of the neurostimulator was found; she got a successful control of it thanks to oral analgesia. In the fortieth week of pregnancy and because of the anxiety the patient suffers, she was admitted at the hospital in order to provoke the labour. As it was decided before, she disconnected the stimulator once the labour started. During active phase of labour, the patient referred intense pain over the area where the neurostimulator was localized which cannot be controlled with epidural anesthesia. A vacuum was performed to shorten this stage and relieve the pain. Finally, a male fetus of 3385 is born, Apgar score of 9/10. Sacral neuromodulation was restarted uneventfully in the early puerperium.

Since Fowler’s syndrome occurs mainly in women of childbearing age, may be of consequence for obstetricians. Based on risk-benefit assessment, although there is controversy, the possibility of maintaining neuromodulation during pregnancy should be considered. There are not fetal complications secondary published. In fact, in the case of switching it off, the need of intermittent self-catheterisation and so that the risk of recurrent urinary infections, what may provoke pregnancy complications.

COI Disclosure: no
Obstetric outcomes not only deeply affect mothers and babies but also those around them. Surgery and supportive care are often the pillars of management of acutely ill patients. However, surgery has its morbidity and, in some situations may lead to suboptimal outcomes eg a patient with coagulopathy. Advances in Interventional Radiology, Anaesthesiology, Transfusion medicine, Intensive care, Management techniques including Drills and Skills and imaging have helped manage critical patients.

To discuss 4 complex scenarios managed in a tertiary care setting in Australia.
To discuss the roles played by multiple disciplines in such situations
To impress on a team approach and the crucial role played by efficient communication and utilization of resources
Development of a Tertiary Centre of Excellence in Obstetrics.

We discuss 4 case scenarios:
1. Placenta Percreta in a post caesarean pregnancy invading the bladder mucosa with abruption and a live baby
2. Placenta Percreta in a post caesarean pregnancy invading the bladder mucosa.
3. Postnatal patient with a 2.5-litre retroperitoneal haematoma following vaginal delivery
4. Post Hysterectomy patient with recurrent PV bleeds and an AV malformation.

In the first patient, use of MDT and intensive senior inputs ensured a safe outcome.
In the second patient, Interventional radiology was combined with Multidisciplinary surgical teams to minimize intra operative blood loss and make surgery safer and easier for the surgical team. In the third patient, use of Interventional radiology negated the need for laparotomy, reduced the morbidity of treatment and hastened recovery of the patient. In the fourth patient, use of Interventional radiology bypassed the need for operative management for post op bleed. This, along with surgical & non-surgical methods like ROTEM, and their role in difficult situations & their life-saving potential are discussed. These were managed using a multidisciplinary team (MDT) approach leading to lower blood loss, lesser morbidity, & improved patient safety and better patient outcomes in these situations.

Newer surgical techniques & prompt recognition, planning & coordination can lead to improved outcomes. Use of Interventional Radiology has led to lower blood loss, lesser morbidity, & improved safety in these situations. The role Anaesthesia, Intensive care, Haematology, Transfusion Medicine, and associated specialties are crucial in managing these patients with multidisciplinary senior inputs, continued vigilance and training, and standardized protocols.

**COI Disclosure:** None declared
**TOPIC:** MATERNAL MORBIDITIES & MORTALITY

**ID:** 333

**TITLE:** PREGNANCY AND NEONATAL OUTCOME OF WOMEN AFFECTED BY GESTATIONAL DIABETES MELLITUS (GDM): EXPERIENCE IN A TERTIARY CARE HOSPITAL

**AUTHORS:** Ferretti A, Fieni S, Ghi T, Di Pasquo E, Suma G, Carpano MG, Kiener AJO, Frusca T

**AFFILIATIONS:** Obstetrics and Gynaecology Operative Unit, Department of Medicine and Surgery, University Hospital of Parma, Parma, Italy

**CONTENT:**
Gestational Diabetes Mellitus (GDM) is associated with an increased risk of maternal and neonatal complications. The aim of this study was to evaluate if a standardised management protocol could lead to a reduction of the adverse outcomes associated to this condition.

This was a retrospective study including women who delivered at our Tertiary Care Center between January and October 2018. The following data were compared between women affected by GDM, diagnosed according to IADPSG-criteria, and non-diabetic women (control): maternal age, pre-pregnant BMI, weight gain, parity, mode of delivery, neonatal weight, neonatal outcome. According to our protocol, diabetic women undergo daily controls of capillary glucose values; weekly assessment of fetal and maternal wellbeing are performed from 36 wks till delivery. Induction of labour is offered within 40+6 wks or at 39 wks in case of insulin therapy, inadequate glycaemic control or estimated fetal weight >90th percentile.

Overall, 162 (7.3%) women affected by GDM were included and compared to 1948 non-diabetic women. Maternal age (mean 33.5 vs 31.9, p< 0.001) and pre-pregnant BMI (mean 26.8 vs 23.4, p <0.001) were significantly higher in the GDM group compared to control, while weight gain was lower in the GDM group (mean 8.5 vs 10.93 kg, p <0.001). No statistically difference was reported in terms of Caesarean Section (13.6% vs 10.6%, p 0.23) as well as in terms of neonatal outcome: incidence of LGA neonates (10.5% vs 11.6%, p 0.67); incidence of SGA neonates (9.25% vs 10.6%, p 0.59); APGAR at 1st minute < 7 (3.09% vs 4.73%, p 0.39); umbilical artery pH< 7.10 (2.88% vs 2.14%, p 0.56); admission in NICU (4.32% vs 4.08%, p 0.80).

Women affected by GDM and managed according a standardised protocol show pregnancy and neonatal outcomes comparable to those reported in general population.

**COI Disclosure:** None declared
The aim of the present study was to analyse neonatal outcome based on glucose patterns during 75g OGTT. This was a retrospective study including women with singleton pregnancies who delivered in our Tertiary University Hospital between January and October 2018 affected by GDM diagnosed according IADPSG-criteria. Women were divided into 3 groups according to the time-point abnormal glucose value at OGTT: Group 1 (isolated abnormal fasting glucose value); Group 2 (abnormal fasting + at least 1 abnormal post-load value); Group 3 (isolated abnormal post-load value/s). Primary outcome included: APGAR at 1st min < 7, arterial cord pH <7.10, NICU admission, incidence of neonatal hypoglycaemia, tachypnoea or hyperbilirubinemia. Moreover, incidence of caesarean section, LGA and SGA, birthweight and insulin requirement were compared among the groups.

A total of 147 women were included in the study: 61 (41.5%) in group 1, 23 (15.6%) in group 2, 63 (42.9%) in group 3. Maternal characteristics did not differ among the 3 groups.

A higher incidence of neonatal tachypnoea was reported in group 1 compared to group 3 (14.3% vs 1.8%; p 0.01) while incidence of neonatal hypoglycaemia was lower in group 1 compared to group 3 (8.9% vs 22.8%; p 0.01). Insulin requirement to achieve glycaemic control was significantly higher in group 2 than in groups 1 and 3 (47.8% vs 21.31% and 12.7% respectively; p 0.002).

Group 2 is associated with higher insulin requirement to achieve glycaemic control. Women with isolated abnormal fasting glucose value reported higher incidence of neonatal tachypnoea and lower incidence of neonatal hypoglycaemia compared to those with isolated abnormal post-load glucose values.

COI Disclosure: None declared
TOPIC: MATERNAL MORBIDITIES & MORTALITY

ID: 340

TITLE: REDUCING MATERNAL MORTALITY THROUGH EARLY DIAGNOSIS OF PREECLAMPSIA

AUTHORS: Ibragimova S, Timokhina E, Strizhakov A.

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CONTENT:
Preeclampsia (PE) is a complication of pregnancy, occupying a leading position in the structure of maternal and perinatal morbidity and mortality. PE complicates 10% of all pregnancies, in the structure of maternal mortality - 15.7%. When PE occurs, the only radical treatment is delivery. Therefore, you need to look for markers for early diagnosis of PE and the beginning of preventive measures in early pregnancy.

The ELISA method determined the level of MMP-2 in venous blood in women with early PE. The study was conducted in the SS Yudin City Clinical Hospital. The level of MMP was determined in the Centralized Laboratory and Diagnostic Service of Sechenov University. The control group consisted of women with a physiological course of pregnancy and childbirth.

The average age of women with early PE was 31.2 ± 4.8 years. Primiparous amounted to 55.5%, PE in anamnensis had 22.2% of women. Anamnesis was aggravated by chronic arterial hypertension (44.4%), genetic thrombophilia, autoimmune diseases (antiphospholipid syndrome) in 22.2%, diabetes mellitus (11.1%). About 20% of pregnancies that were complicated by early PE were conceived as a result of IVF. The gestational age at the time of delivery was 30.6 ± 2.6 weeks. The mass of children at birth is 1573.7 ± 136.4 g. The score for APGAR for 5 minutes is 5.6 points. The severity of the condition of children was due to prematurity (88.6%), fetal growth retardation syndrome (45.1%), respiratory failure (78.5%), cerebral depression (65.1%), intrauterine infections (33.2%); severe asphyxia, congenital tachypnea, anemia (22.1%), hypoxemic shock, hemorrhage (11%). Perinatal mortality was 4.5%. Maternal complications: HELLP-syndrome (18.1%), premature detachment of the normally located placenta (9%), hemolytic-uremic syndrome, thrombotic microangiopathy, eclampsia, brain edema (4.5%).

The average MMP-2 in women with severe early PE was 50763.2 pg / ml, in the control group 27281.3 pg / ml. In the group with moderate early PE MMP-2 - 43599 pg, and in the group of late moderate PE - 24366.4 pc / ml.

Thus, MMP-2 can be used as a criterion for severity in severe PE with both early debut and late debut, but does not have a diagnostic value in late moderate PE.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 2

TITLE: SETTING UP A BREECH BIRTH PATHWAY WITHIN AN NHS SETTING

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CONTENT:
Since the publication of the Term Breech Trial (Hannah et al, 2000) the choice of mode of birth for women with a breech presentation has been limited predominantly to planned Caesarean. Despite the known flaws in the research, vaginal breech birth (VBB) is still not being offered as an option for women, partly due to the lack of knowledge and skills. In St George’s Hospital, VBB is now a realistic option for women and there is now a dedicated pathway for women which has had excellent outcomes.

Following an audit of breech births within the hospital in 2017 it was identified that there had been no planned vaginal breech births (VBB) and only five undiagnosed breech births which had not had a Caesarean section. Following the review of the audit and latest research regarding breech birth it was decided in line with Better Births that a pathway should be set up for women found to have a breech presentation at term. A new leaflet was designed using unbiased information based on RCOG (2017) guidelines, women are counselled by an experienced breech midwife and a dedicated obstetrician. ECV, moxibustion, chiropractor and acupuncture are all discussed as options for turning a breech baby and an ECV is booked if the woman wishes. If the ECV is unsuccessful the breech midwife meets with the parents again and a birth preference plan is created together supporting wishes for mode of birth. The breech midwife has run three full days training days in physiological breech birth and has trained over 100 doctors and midwives. She is also responsible for teaching in skills and drills and to the students, our future midwives, in the university. Following the training and the pathway being set up there has been a vast increase in the number of VBBs. Between January and March 2018 there have been twelve VBB with excellent outcomes. The feedback from women has also been outstanding. There have been many challenges to overcome but the service has meant women now have more choice.

A breech birth pathway is a valuable service within any healthcare setting, however it is vital that in-depth training is provided prior to setting up any service of this nature due to the lack of knowledge and skills in VBB. Healthcare professionals are able to regain their skills in VBB whilst women have more choice around mode of birth. It reduces first Caesarean sections which leads to a reduction in repeat Caesareans and therefore improves outcomes for mothers and babies in the long-term.

COI Disclosure: None declared.
TOPIC: WOMEN CENTERED CARE

ID: 36

TITLE: OBSTETRIC VIOLENCE : AT THE EXPENSE OF WOMEN'S HEALTH AND CAREGIVERS

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CONTENT:

In 1985, WHO denounced the over-medicalization of birth. The 2014 statement on "Preventing and eliminating disrespect and abuse during childbirth in care facilities" marks international recognition of "obstetric violence". As belonging to the gender, Venezuela inscribed it as such in its Penal Code in 2007, followed by Argentina in 2009 and Mexico in 2014. This violence concerns those exercised on women by health professionals in defiance to their rights and reproductive abilities.

Many studies show the impact of this violence on women's health. The Lancet already reported in 2002 an "emerging problem", which until then had escaped both rich and poor countries, but whose importance should be taken into account in terms of public health. In 2014, in the same journal, the link with over-medicalization and its integration in the care systems was focused on while the journal PLOS Medicine recognizes this phenomenon as a subset of violence against women, as a result of bad relationships between women and caregivers within the care system. Recent work shows that it is a subjective experience which is decreased by a loss of power in the asymmetry of the caring relationship, with a feeling of annihilation, suffering and dehumanization, while studies of the post traumatic stress disorder in childbirth, yet classic, reveal a prevalence of 1.3 to 6%. Women's words often leave the caregivers on a defensive posture while they scathingly remove any social, professional or individual recognition; especially when the medical performativity, faced with the dangerousness asserted for any birth, and the scientistic approach of the practices, devote to women a deeply gendered patriarchal model. These highly symbolic wounds threaten health at work among caregivers. They can help to understand all the individual and collective defensive measures which are meant to protect them. But they also mean a deep change in the relationships between caregivers and their patients.

Indeed, the caring relationship is nothing more than a service relationship where each of the protagonists has its own philosophy of rendered services (Hughes, 1958). So, caregivers need to involve women in their own work activity, in a spirit of a genuine collective work, under the sign of mutual recognition, reciprocity and cooperation. In shared intersubjectivity, this partnership is the only means to offer the caregivers and women in their work of birth a true feeling of their real worth.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 48

TITLE: LABOR PAIN IN PREGNANT IMMIGRANTS; PERCEPTION AND MANAGEMENT

AUTHORS: A. Vancells Prat 1; L. de Frutos Cristobal 2; L. Navas Pérez 3; N. Vilanova Alsedà 1

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2. Midwife in University Hospital of Vic
3. Midwife in Primary Care of Granada.

CONTENT:
Labor pain is catalogued of one of the most painful. This pain has a great variability according to the pregnant women, as it can be influence by physiological, psychological, social and cultural factors. Most of the variables have been well studied, although culture is probably one of the less studied and that it has a great influence on it.

Nowadays we live in a very global world where multiculturality is part of our society, so immigrant women are part of the population to attend in labor.

The objective of this study was to analyze the perception that immigrant women have of the pain of childbirth and their management; linked to their beliefs, ideologies and values, and how they are influenced by them. Methodology used is a qualitative pilot study based on in-depth interviews and with the complementary use of the observation-participant technique in immigrant women from Morocco, Sub-Saharan Africa and India who accessed the service of gynaecology and obstetrics between the months of March to July of 2016 of the University Hospital of Vic.

Three in-depth interviews and three observations from women from different origins were obtained and after transcribing and coding the obtained dates, we obtained three categories: the meaning and perception of childbirth pain, the management and the pain’s demonstration and the support in labor.

From here it was obtained that women with a Maghreb or Sub-Saharan origin tend to maintain more passive attitudes and behaviors and with a tendency towards rejection of epidural analgesia.

On the other hand, women of Hindu origin are very expressive and suffer from labor pain. This group is the most demanding of epidural analgesia.

This shows us how culture has a very important value in relation to the perception of childbirth pain. Women from Maghreb or Sub-Sahara understand that women have to go through and endure the pain of childbirth as an obligation of being a woman. Hindu women consider that they should go through pain after conception and that they must show it. It would be necessary to expand the sample to reach the cases saturation.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 52

TITLE: PREDICTING CONTINUATION OF EXCLUSIVE BREASTFEEDING UNTIL FOUR MONTH AFTER CHILD BIRTH USING BANDURA'S SOCIAL LEARNING THEORY

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CONTENT:
Considering the unique role of exclusive breastfeeding (EBF) in mother & child health and because of a big fall in the rate of EBF in recent years in country, this study was conducted to define the factors influencing duration of exclusive breastfeeding in Mashhad, Iran, using Bandura’s social learning theory.

This cross-sectional study was done on 470 mother who were undercover of prenatal care in health centers of Mashhad in 2018. Data on mode of infants’ feeding in hospital and at four weeks and four month post birth, Information on demographic variables, mother’s breastfeeding attitude and breastfeeding self-efficacy were gathered. Multivariate regression test was used to determine the predicting value of individual, social and environmental factors in continuation of Exclusive Breast Feeding.

Most of mothers (96%) had a good attitude to breastfeeding, practiced skin-to-skin contact in first 30 minutes after birth (67%), initiated breastfeeding up to 30 minutes after delivery (59%) and breastfed at discharge (97%). However, the rate of EBF dropped at the 4th week (62%). Multivariate regression test showed that attitude to breastfeeding, knowledge about the signs of not enough milk, the lack of husband’s support and the time of breastfeeding initiation after childbirth were significantly related to continuation of EBF (p<0.05 in all cases).

In spite of the good attitude toward breastfeeding, the continuation of EBF until the fourth week after childbirth was not as expected. The findings show the need for appropriate interventions to promote exclusive breastfeeding in mothers identified as at risk for early cessation of EBF.

COI Disclosure: “None declared”
TOPIC: WOMEN CENTERED CARE

ID: 53

TITLE: USE OF PROFILE OF MOOD STATUS (POMS) AT MATERNITY CARE

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CONTENT:

It is common for women to experience mental issues at the first time pregnancy and/or high risk pregnancy. In Japan, we have more high-risk pregnant women due to late marriage, assisted reproductive technology (ART) and survival from paediatric conditions. In addition, many of pregnant women do not have any support from parents or relatives because family size has been getting smaller. It is very important for us to check mental condition of pregnant women at maternity outpatient recently.

307 Japanese pregnant women who came to our hospital for seeking first time maternity check-up were administered the short form of Profile of Mood States (POMS). The short form, based on the original 65-item questionnaire developed by McNair et al., 24 contains six subscales measuring tension, depression, anger, fatigue, confusion, and vigor. A total mood disturbance (TMD) score is also calculated. The TMD score is a summary measure of distress with higher scores indicating increased mood disturbance. Risk factors noted by midwife and obstetrician were juvenile pregnancy, twin pregnancy, unmarried mother, divorce, fetal medical conditions and maternal medical conditions.

There were no statistically significant differences in six subscales measuring. However, TMD was rather higher in the group of aged pregnancy (>40y/o) and pregnancy with fetal complications. The most contributed measurement for TMD was fatigue, depression. Primipara group shows more anger. The frequency of the score which suggest possible medical intervention was 0.6-3.3% at each measurement. The score which suggest pay attention was about 10.1-10.7%. For those women shows high-risk, we offer the interview with psychotherapist to see actual needs to see other specialists.

This study showed mood change could be related to aged pregnancy and fetal complication. In addition, POMS is very helpful tool to find out high-risk pregnant women in short time. For example, we could know some patients were at risk who did not declare their psychiatric medical history or their divorce to midwives due to this POMS check. Knowing mood change would lead better psycho-social support in maternity care.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 55

TITLE: PROVIDING PERINATAL CARE TO WOMEN WITH VISUAL IMPAIRMENT

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CONTENT:
Introduction: Midwifery community discusses the issue of patient disability very rarely. Our knowledge related to the experience of visually impaired women in perinatal care remains limited. Treatment of such patients should be sensitive to their needs and expectations. The in-care experiences of this group have still not been adequately researched. The aim of study is describing problems, needs and standards-related expectations of women with visual impairments in perinatal care.

Methods: Qualitative research conducted in the period of 2013-2016 on 16 blind or low vision women receiving perinatal care, audio-recorded and transcribed verbatim. Post-natal structured interviews evaluated the perceptions of visually impaired women based on Interpretative Phenomenological Analysis (IPA). Four major areas of interest were pre-selected: accessibility of childbirth preparation, accessibility of perinatal care and hospital facilities, midwives’ attitudes and the interviewees’ expectations for care improvements. The evaluation focused on patients’ perceptions and satisfaction levels related to perinatal care.

The accounts provided insight into the lack of satisfaction with the quality of perinatal care of women who are blind or have low vision, including the childbirth preparation classes, hospital facilities and hospital staff attitudes as not actually meeting their functional needs. They also suggested ways to tailor the present approach to midwifery care to improve its quality.

The lack of separate standards and procedures of perinatal care for disabled women requires reorganization of such care to eliminate psycho-social barriers and increasing the necessary newborn-care skills and competencies of disabled women. Such standards and procedures should be based on research into experiences of disabled patients. Visually-impaired women, given the difficulties they encounter in communication with others, require special, holistic midwifery care.

COI Disclosure: None declared
Anismus is better known as the spastic pelvic floor syndrome or anal sphincter dyssynergia or pelvic floor dyssynergia. Patients mostly present with a history of chronic constipation or faecal overflow incontinence and have a functional rectal obstruction due to impaired relaxation of the pelvic floor muscles like levator ani, puborectalis or external anal sphincter along with an abnormally angulated recto-anal axis.

34-year-old primigravida is booked under consultant-led-care for her pregnancy and is presently 28 weeks gestation. She has conceived following a cycle of ICSI with singleton pregnancy. She has Grand mal epilepsy, hyperthyroidism, degenerative changes with disc prolapse at L5-S1 and anismus with a long-standing history of defecation problem and constipation. Gastroenterology team has advised her to have a caesarean section in view of her pelvic floor dysfunction. She is planned for a close monitoring for both mum and baby although her pregnancy with regular MDT input from the neurology, gastroenterology, endocrine, orthopaedic, anaesthetic and the neonatal team.

Spasticity or uncoordinated contraction of the pelvic floor muscles may be caused due to physical trauma like pregnancy and childbirth or without any cause known. Both children and adults may be affected with a higher incidence noted in females. Large proportion of these patients have history of sexual abuse. Anismus is diagnosed by digital rectal examination and manometry and can be classified into 4 types of dyssynergia based on the manometric pattern.

Dietary bulk forming agents and biofeedback may ameliorate the condition. Botulinum toxin injection into the external anal sphincter has shown mixed results.

Are we over-diagnosing the problem? Research has shown that pelvic floor muscle can tonically contract during per-rectal examination in a control population who present with no concern. More work is awaited in this field to understand the optimum pregnancy and delivery care plan in patients diagnosed with Anismus.

**COI Disclosure:** None declared.
TOPIC: WOMEN CENTERED CARE

ID: 90

TITLE: FULFILLING A NEED. HOLISTIC MIDWIFERY IN THE NETHERLANDS: A QUALITATIVE ANALYSIS

AUTHORS: M. Hollander1, E. de Miranda2, F. Vandenbussche1, J. van Dillen1 and L. Holten3.

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CONTENT:
The Netherlands has a maternity system with integrated midwifery care including the option of home birth for low risk women. A group of Dutch midwives is willing to assist women in high risk pregnancies during a home birth against medical advice. There are no studies on holistic midwifery in the Netherlands yet. We examined holistic midwives’ motivations and way of practice, in order to provide insight into the way they work and to improve relationships between all care providers in the field.

An exploratory qualitative research design with a constructivist approach and a grounded theory method were used. In-depth interviews were performed with twenty-four holistic midwives on their motivations for working outside their professional boundaries. Open, axial and selective coding of the interview data was done in order to generate themes. A focus group was held for a member check of the findings.

Four main themes were found: 1) The regular system is failing women, 2) The relationship as basis for empowerment, 3) Delivering client centered care in the current system is demanding, and 4) Future directions. One core theme emerged that covered all other themes: Addressing a need.

Holistic midwives explained that many of their clients had no other choice than to choose a home birth in a high risk pregnancy because they felt let down by the regular system of maternity care. They wanted to address this need, sometimes at high personal and professional cost.

Holistic midwives deliver an important service. They provide continuity of care and succeed in establishing a relationship with their clients built on trust and mutual respect. Some women feel let down by the regular system, and holistic midwives may be the last resort before those women choose to deliver unattended by any medical professional. Maternity care providers should consider working with holistic midwives in the interest of good patient care.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 91

TITLE: 'SHE CONVINCED ME': PARTNER INVOLVEMENT IN CHOOSING A HIGH RISK BIRTH SETTING AGAINST MEDICAL ADVICE IN THE NETHERLANDS: A QUALITATIVE ANALYSIS.

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CONTENT:
Home births in high risk pregnancies and unassisted childbirth seem to be increasing in the Netherlands. There is a lack of data on women’s partners’ involvement in these choices. The majority of available literature focuses on the women’s motivations, while the partner’s influence on these decisions is much less well understood. We aimed to examine partners’ involvement in the decision to birth outside the system, to provide professionals with insight regarding interactions with these partners.

An exploratory qualitative research design with a constructivist approach and a grounded theory method were used. In-depth interviews were performed with twenty-one partners on their involvement in the decision to go against medical advice in choosing a high risk childbirth setting. Open, axial and selective coding of the interview data was done in order to generate themes.

Four main themes were found: 1) Talking it through, 2) A shared vision, 3) Defending our views, and 4) Doing it together.

One overarching theme emerged that covered all other themes: ‘She convinced me’.

These data show that the idea to choose a high risk birth setting almost invariably originated with the women, who did most of the research online, filtered the information and convinced the partners of the merit of their plans.

Once the partners were convinced, they took a very active and supportive role in defending the plan to the outside world, as well as in preparing for the birth.

Maternity care providers can use these findings in cases where there is a discrepancy between the wishes of the woman and the advice of the professional, so they can attempt to involve partners actively during consultations in pregnancy. That will ensure that partners also receive information on all options, risks and benefits of possible birth choices, and that they are truly in support of a final plan.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 128

TITLE: IMMIGRANT WOMEN’S EXPERIENCES WITH INTRAPARTUM CARE

AUTHORS: Prosen M 1; Ličen S 2; Rebec D 3; Bogataj U 4; Karnjuš I 5

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CONTENT:
Migrant women form one of the most vulnerable population groups of migrants due to the fact they are women and due to the health risks that arise from migration process. Issues related with culture, social integration and issues related to accessing healthcare services are just some of the factors that contribute to health disparities among immigrant women in the host country. The aim of the study was to explore immigrant women’s experiences and perceptions of intrapartum care.

A qualitative exploratory, descriptive design was employed. A purposive sample consisted of ten immigrant women admitted to the delivery room of a maternity hospital in south-western Slovenia. The participants’ average age was 30.5 years. Three women came from Bosnia and Herzegovina, two from Russia, one each from Ukraine, Kosovo and Iran. Eight of them were primipara and two were multipara. The youngest gave birth in their twenties and the oldest was 37 years. The data were collected between January and April 2018 using semi-structured interviews. The data were audio-recorded, transcribed verbatim and analysed using the computer software program NVivo. Thematic analysis was chosen as the method of content analysis.

Three major themes were identified in the analysis: (1) personalised and responsive intrapartum care; (2) autonomy and control over decision-making; and (3) language barrier. All participants expressed satisfaction with their intrapartum care as they recognised that their cultural background was respected in delivering that care. Their experiences were considerably marked by health disparities in their home country. Hence, some of them were very surprised that their autonomy was respected, which added to their positive birth experience. Language barrier was perceived by a few women as a potential obstacle in delivering care, although it was also seen as a challenge that healthcare professionals must address.

The nature of women’s interactions with caregivers is a critical factor in women’s experiences during the birth process. Some participants regarded the empathy, compassion, support and companionship during birth they received an unusual experience. Because of that they did not mind the language barrier. Implications for clinical practice suggest that woman-centred care needs to be further promoted while appropriate solutions to overcome the language barrier should be identified.

COI Disclosure: None declared.
The research was partially funded by the INTERREG European programme V A Italia-Slovenija 2014-2020.
TOPIC: WOMEN CENTERED CARE

ID: 136

TITLE: INTENSITY AND MANAGEMENT OF PAIN PERCEPTION ON SKIN-TO-SKIN POST CESAREAN SECTION THROUGH VISUAL ANALOG SCALE (VAS) AT INFANTA LEONOR UNIVERSITY HOSPITAL IN MADRID, SPAIN.

AUTHORS: M. Morlans Lanau 1, A. Gil Estevez 2, I. Tostado Acero 3, N. Cobo Garcia 4, A.M. Álvarez Ramírez 5, M. Triguero Gil 1, E. Martín Ramos 1, A.I. Navas Corral 1

AFFILIATIONS: 1. - Infanta Leonor University Hospital, Spain 2. - Infanta Leonor University Hospital, Spain 3. - Infanta Leonor University Hospital, Spain. 4. - Health Center Segovia II, Spain.

CONTENT:

Early Skin-to-skin Mother-Newborn is a strongly recommended based-evidence practice due to multiple benefits. Last recommendations advised to reduce cesarean section rates by improving motherhood experience through a comprehensive midwifery healthcare. The pain perceived by women after surgical intervention is essential considering that an inadequate handling would affect significantly maternal and neonatal wellbeing. Several articles show decrease of pain in cesarean section due to skin-to-skin

An observational, descriptive and retrospective study was done by analyzing the data collected through SELENE – Health Information System during 2018. Visual Analog Scale was the instrument to measure the grade of intensity of pain perceived by the mother. Is a numerical scale - Likert type- the value zero corresponds to absence of pain and value ten to maximum pain perceived. Pain assessment is performed by the midwife on five different readings as per protocol on immediate postpartum for the first two hours. Besides, the pain must be evaluated anytime the mother is on pain. After pain evaluation the analgesia protocol is applied to obtain a score lower or equal than three

Data analysis was carried out through SPSS statistical program and represented by tables and graphs. Sample study includes the total of cesarean section performed during 2018. 46% performed skin-to-skin in delivery room. 54 % mother required admission in the Recovery Unit and / or Newborn needed specific medical health care in Neonatal Unit. Indicators analyzed included the Visual Analog Score Scale, the administration of different analgesics and painkiller drugs and the recovery time needed to follow the criteria to transfer the woman to Maternity Ward

The skin-to-skin practice offers multiple based-evidence benefits, including reduction of perception of pain and a decrease on use of analgesic drugs. As well, the right of the newborn to non-separation whatever the way of birth has to be considered. The Midwife acquires a fundamental role as professional in charge of comprehensive mother and newborn health care provider throughout the cesarean section process.

COI Disclosure: None declared.
CONTENT:
Physiologically, women are expected to have the lowest risk of iron deficiency anemia during the postpartum period as maternal iron requirements decline after delivery. However, recent evidence suggests that poor postpartum iron status may be more common than previously thought. We conducted a pilot study to evaluate the prevalence rates and the risk factors of postpartum anemia in a multi-ethnic cohort of Singaporean women.

This was a single center, cross-sectional pilot study consisting of 113 women with the following criteria: above 21 years of age, had a singleton delivery, and had been screened to exclude any haemoglobinopathies. At their 4th to 6th week postpartum visit, their full blood count and serum ferritin were obtained. The definition of postpartum anemia in our study was a hemoglobin level less than 12g/dL, in accordance with the values used by the Centers for Disease Control (CDC). Prenatal anemia was defined as <11g/dL for the first and third trimesters and <10g/dL for second trimester. Postpartum iron deficiency was defined as a serum ferritin of less than 30ug/L.

The prevalence of postpartum anemia in our study was 19.5%. 22.3% of the study population had a serum ferritin level less than 30ug/L. 10.4% of the Chinese were anemic compared to 31% and 35% of the Malays and Indians respectively. There was a higher percentage of women in the postpartum anemic group who had previous Caesarean section deliveries (36.4%) than in the non-anemic group (13.2%). A woman with first trimester hemoglobin of less than 12g/dL had an odds ratio of 7.03 for developing postpartum anemia (95% CI 2.35 – 23.36, p<0.001) and a woman with a third trimester hemoglobin of less than 11g/dL had an odds ratio of 13.4 for developing postpartum anemia (95% CI 4.48 – 43.82, p<0.001).

Determining the extent of this public health problem is important to guide the implementation of health policies such as introducing selective screening of high risk groups (Caesarean section delivery in prior pregnancy or low haemoglobin levels in the first and third trimesters) in the postpartum period for anemia and iron deficiency.

COI Disclosure: None declared
A review of recent literature shows that research in the area of childbirth and culture has been conducted, however, we did not find many studies that involve problem-based learning as an educational strategy. For that reason, the aim of this literature review was to evaluate the literature on how effective strategy as problem-based learning can improve cultural competence among healthcare professionals.

A literature review was conducted in July 2018 to address the question “How effective is problem-based learning as an educational strategy to improve cultural competence among healthcare professionals in intrapartum care?” The search was conducted by using online bibliographic databases such as PubMed, CINAHL, and ScienceDirect. The primary search terms were: ‘intrapartum care’, ‘culturally competent care’, ‘cultural competency’, ‘cultural diversity’, ‘cultural competence education’, and ‘cultural sensitivity training’. The inclusion criteria were considered. The review of the published literature was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA).

The initial broad search methods via electronic databases yielded 32 potential articles on cultural competence and problem-based learning as an educational strategy. The abstracts of the articles were screened, and 12 studies were identified that manipulated cultural competence, included healthcare professionals and were not qualitative. Of the 12 studies, 7 articles were identified that met the additional criteria of study design and quantitative data results. These articles were then evaluated for quality. Subsequently, there were 3 articles rejected due to a zero-quality rating. After a thorough evaluation of the research studies, a total of 3 studies met all inclusion criteria and were included in this research study.

This review of the literature indicates that there is some evidence that evidence-based learning as an educational strategy can improve cultural competence among healthcare professionals when dealing with women in the intrapartum period. Although there is evidence that evidence-based learning interventions can improve knowledge, attitudes, and behaviours in healthcare professional, further research needs to be conducted to determine which learning interventions are most effective.

COI Disclosure: The research was partially funded by the INTERREG European programme V A Italia-Slovenija 2014-2020.
TOPIC: WOMEN CENTERED CARE

ID: 171

TITLE: HIGH CERVICAL PHIGFBP-1 CONCENTRATION IN ACTIM PARTUS 1NGENI TEST IS A RELIABLE INDICATOR OF PRETERM DELIVERY WITHIN 7 DAYS

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AFFILIATIONS: Medix Biochemica Oy, FI-02180 Espoo, Finland

CONTENT:
Preterm delivery is the leading cause of neonatal mortality, necessitating accurate predictive measures. Elevated cervical concentration of the highly phosphorylated isoform of insulin-like growth factor binding protein 1 (phIGFBP-1) indicates detachment of decidua and chorion, signaling imminent delivery even when fetal membranes are intact. The clinical performance of Actim Partus 1ngenii—a quantitative test employing monoclonal antibodies specific for phIGFBP-1—was evaluated retrospectively.

Actim Partus 1ngenii was utilized for the quantification of phIGFBP-1 in 120 cervical swab samples from pregnant women at different gestational stages, with or without symptoms of preterm labor. The test was performed under simulated use conditions according to the manufacturer’s instructions and approved clinical guidelines. Median phIGFBP-1 concentration and cervical length were recorded for the clinical outcome groups: delivery within 7 days vs. delivery after 7 days, of sample collection. A phIGFBP-1 concentration of 10 ng/L was used as the cut-off for a positive test. Differences in phIGFBP-1 concentration were analyzed by ANOVA; the correlation between phIGFBP-1 level and cervical length was analyzed by two-tailed Pearson correlation.

The median cervical phIGFBP-1 concentration quantified by Actim Partus 1ngenii was significantly higher (p=0.011) in women who delivered within 7 days of sample collection (15.0 ng/L) as compared to women who delivered after the 7-day period (4.0 ng/L). The median cervical length was shown to be significantly shorter (p=0.001) in women that delivered within 7 days of sample collection (15.0 mm), as compared to women who delivered later in their pregnancy (30.0 mm). Additionally, an elevated cervical phIGFBP-1 concentration correlated with a shorter cervical length in women who delivered within 7 days of sample collection (ρ=-0.421; p=0.05).

Accurate identification of pregnant women who are at risk for preterm delivery is crucial for commencing treatment strategies that accelerate fetal pulmonary maturation and delay birth. In this analysis, a positive Actim Partus 1ngenii result reliably predicted delivery within 7 days of cervical sample collection in women with intact fetal membranes. Actim Partus 1ngenii is therefore a valuable clinical tool for the fast and accurate identification of women at high risk for imminent delivery.

COI Disclosure: All writers are employees at Medix Biochemica
TOPIC: WOMEN CENTERED CARE

ID: 205

TITLE: EVALUATING MIDWIVES COMMUNICATION SKILLS FROM THE PERSPECTIVE OF PARTURIENT WOMEN ATTENDING TO HOSPITALS FOR DELIVERY

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CONTENT:
Midwives must be attuned to the needs of mothers using effective communication skills. For this purpose the appropriate in service trainings should be designed and effectiveness of such programs should be assessed. We conducted this study to assess the behaviors of midwives in communication with parturients during the labor and postpartum. These midwives were participating in a 10 hour integrated educational program on communication skills. The results then were compared with the control group.

In this study 150 midwives working at educational hospitals who participated in an integrated educational programs on communication skills were recruited and their communication behavior at work was assessed from the perspective of parturients 6 weeks later. For this purpose, three parturients women were selected per each midwives. The data on midwives behavior were gathered by a researcher through interviewing the perturients during three phase of labor, delivery and postpartum period and filling the Interpersonal Communication Skills inventory. Each midwives had three score that mean of them was considered as her score of communication behavior. Data were analyzed using descriptive statistics, t-test, ANOVA, and Pearson correlation test.

From the viewpoints of parturients, the mean score of midwives communication behavior in educated participants was 98.95±7.32 vs 86.14±6.18 (out of 160) in control group (p=.000). The behavior of 36% of midwives who participated the course and 19% of control group were classified as good and very good level. Most of them in two groups placed at medium level of communication behavior. Midwives’ communication behavior scores were in significant relationship with parturients’ satisfaction of childbirth (p=.000) and was not in relationship with working history and the number of children that the midwives born.

From the parturients' perspective, the quality of midwives’ communication scored as better in educated midwives. Such training courses during the length of midwifery services are necessary, but isn’t enough when hold at a section of time. So, designing and implementing continues training programs on communication skills applying active methods and emphasizing on midwives’ specific educational needs, as well as continuing to monitor their communication behaviors are recommended.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 208

TITLE: IMPORTING A MODEL: MIDWIFE-LED UNIT PROJECT FOR SURESTE UNIVERSITY HOSPITAL, MADRID, SPAIN

AUTHORS: LOPEZ RABAT, S.

AFFILIATIONS: MIDWIFERY UNIT. OBSTETRIC DEPARTMENT. SURESTE UNIVERSITY HOSPITAL. MADRID, SPAIN

CONTENT:
Lately, Spanish population demands a fresh comprehensive approach on Motherhood Health practices by gender-based care and considering new family models, rejecting current one. Health Ministry’s Guidelines recommend a transversal women centered care. With these essential reasons to switch to a modern framework, main challenges will be resource management and architectural improvement. Also, Maternity staff must improve skills on innovative manner without leaving aside process’ quality and safety.

Taking advantage of the future expansion of the Obstetric area on Sureste University Hospital, Madrid, Spain, a statistics review was done over total deliveries performed from 2013. Numbers shows 1036 as annual average, 74% vaginal deliveries, 20% cesarean section rates.

As Unit Supervisor I presented an innovative proposal to the Hospital Director to develop an alongside Midwife-led Unit. Project had an evidence-based line of action, was adapted to our hospital structure and functionality and focused on low-risk pregnancy women. Expected start up on last quarter of 2019. Initial duties will be selecting work groups in order to develop protocols. Indicators will be calculated based on data collection recorded on SELENE-Health Information System

Proposal is awaiting for the final authorization. After one year of implementation we expect to achieve the same optimal results as countries with similar Unit Management. Outcomes indicators:
- Improve women’s satisfaction.
- Upgrade families perception on quality care services.
- Scale up on decision-making, autonomy and respect.
- Reduce cost-effective resources: human and material.
- Higher number of vaginal low-risk births, reducing caesarean section rates.
- Decrease mother deliveries’ complications.
- Lower number of newborn admitted to Neonatal Unit
- Breastfeeding rates’ rise.

Would be desirable that spreading out this program will reduce maternal and neonatal mortality in long term.

Projects of these characteristics have already shown to be feasible and to have cost-effective impact. Midwife-led units are uncommon in Spain, however Midwives have the knowledge and abilities to cover manager positions. Hospital managers should further this kind of initiatives in order to boost services’ quality and to reduce costs, listening to population demands as well.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 216

TITLE: WHEN DO PREGNANT WOMEN RECEIVE THE HEALTH EDUCATION ABOUT THE BIRTH PLAN?

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CONTENT:
There is little information about when midwives perform health education (HE) on the birth plan (BP) to pregnant women.

Objectives
To identify the prevalence of health education on the BP, which are performed by midwives, during the prenatal care of pregnant women and the weeks of gestation in that is performed; as well to analyse whether there is a relationship between the demographic and obstetric profile of the pregnant women and the centre where it is provided and the delivery of the HE.

A descriptive multicentre study was carried out in 5 centres of Attention to the Reproductive and Sexual Health of primary care of the province of Barcelona (Spain). The source of information was the electronic clinical register (ECR) of 3,749 women with prenatal care between September of 2015 and August of 2016. The statistical analysis was carried out with the SPSS 24.0 program. Approval of Ethical Committee was obtained (IDIAP: P16/157)

The information was obtained of 2,937 ECR (78.34%). The average age of pregnant women was 31.08 (SD:5.7) years. 1,568(53.4%) were born in Spain. 73.7%(2,165) had previous births, and 61.25% (1,798) had a low or medium obstetric risk. The prevalence of HE on the BP was 86.9%(2,551);(CI 95%: 85.6-88.1). The mean of weeks(W) in which the HE was performed was 24.76 (SD:11.2; min:5 and max:39); and in 22.2% (548) was performed between 28 and 32W.

Having a lower number of births is an independent factor to receive HE about the BP (OR= 0.90); on the contrary, having a “very high” level of obstetric risk is an independent factor to not receiving it (OR= 0.57). The centres with a high prevalence of HE on the BP had a lower compliance with the weeks.

Only a fifth part of the pregnant women received the educational activity between 28-32 weeks and a great disparity was observed according to the centres. Centres with a high prevalence of health educational does not imply providing it at the recommended period. The pregnant women with very high obstetric risk received this activity less frequently. Continuing education to the midwives on which period must provide health educational on the birth plan must be organised.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 219

TITLE: SOCIO-CULTURAL AND CLINICIAN DETERMINANTS IN THE MATERNAL DECISION-MAKING PROCESS TO
CHOICE TRIAL OF LABOR VERSUS ELECTIVE REPETEAD CAESAREAN SECTION: A COMPARISON BETWEEN SETTINGS

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AFFILIATIONS: 1 Department of Obstetrics and Gynaecology, Fondazione Policlinico Universitario ‘A. Gemelli’
IRCCS, Rome, Italy.
2Università Cattolica del Sacro Cuore, Rome, Italy.
3 Department of Obstetrics and Gynaecology, S. Chiara Hospital, Trento, Italy.

CONTENT:
A global increase of caesarean section (CS) rate has alerted the Health Care Systems. Despite the vaginal
birth after caesarean (VBAC) is defined as a safe and suitable choice for women who have had a prior CS, the current rate is still low across countries. To identify socio-cultural and clinician determinants on the decision-making process in the choice for trial of labor after cesarean (TOLAC) or elective repeat CS (ERCS) in delivering women in two opposite clinical settings.

A prospective cohort study including 133 patients, of these 95 admitted for assistance at birth at the Departments of Obstetrics and Gynaecology, Fondazione Policlinico Universitario ‘A. Gemelli’ (FPG) IRCCS, Rome, and 38 at S. Chiara Hospital (SCH), Trento, Italy, was constructed. A tailored questionnaire focused on epidemiological, socio-cultural and obstetric data was administrated in VBAC and ERCS groups.

VBAC rates were higher at SCH than at FPG (68.4% vs. 23.2%; p<0.05). At high levels of education and no-working condition corresponded lower rate of VBAC. Proposal on delivery mode after previous CS has been missed in both settings. Participation to prenatal course was significantly deficitary among women in ERCS groups. The following determinants were found in the decision-making process: maternal age (OR=0.968 [95%CI 0.941-0.999]; p=0.019), education level (OR=0.618 [95%CI 0.419-0.995]; p=0.043), information received after the previous CS (OR=0.401 [95%CI 0.195-1.252]; p=0.029), participation in antenatal courses (OR=0.534 [95%CI 0.407-1.223]; p=0.045), and self-determination in attempting TOLAC (OR=0.756 [95%CI 0.522-1.077]; p=0.037).

In the attempt of a promotion of person-centered care, increases in TOLAC/VBAC rates could be achieved by focusing on individual maternal needs. An ad-hoc strategy for making birth safer should begin from an accurate information at time of the previous CS.

COI Disclosure: None declared
COULD THE MATERNAL RACIAL ORIGIN TO BE WELL-DEFINED AS A DETERMINANT IN THE HEALTH CARE COST OF ASSISTANCE AT BIRTH?

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2Università Cattolica del Sacro Cuore, Rome, Italy. 
3Clinical Directorate, Fondazione Policlinico Universitario ‘A. Gemelli’ IRCCS, Rome, Italy.

CONTENT:
In last decades, migration flows have not only influenced the clinical practice in obstetrics, but also increased the attention by health care systems due to additional costs. To quantify the average and total hospital delivery cost associated with maternal morbidity in women admitted for birth assistance and segregated by racial origin.

Delivering women admitted for assistance at birth in a five-year period (2012-16). Economic evaluations were performed by using the ‘diagnosis-related group’ (DRG) approach. General and specific costs plus obstetric complications in both mode of delivery (vaginal delivery (VD) and cesarean section (CS)) were assessed for each ethnic group.

Increased CS rates were recorded in all minority ethnic groups, most recurrent among Maghreb (51.5%) and Afro-Caribbean (47.8%) ethnicities. A twice incidence of complicated VD was observed in the minority groups, led by the Afro-Caribbean (69.9%), and followed by Asiatic (64.1%), Maghreb (63.2%) and Latin-America (62.7%) patients. The rate of complications according to the surgical mode of delivery (elective or emergent CS) was equally greater among subgroups (plus 11%, as mean) in comparison with Caucasian (21.8%). Afro-Caribbean delivering women had a significantly higher increased risk of complicated CS among all subgroups.

In a cost-analysis at birth assistance, minority groups are at increased risk of maternal complications, requiring a more expensive clinical assistance. Afro-Caribbean women conduct the health care cost for birth assistance due to over two-fold risk for having a complicated delivery.

COI Disclosure: None declared
Options for place of birth vary between countries. In Spain almost the 100% of births happen in hospital obstetric units. In 2017, Catalonia opened the first alongside Birth Center funded by the public health system. The safety and effectiveness of midwifery units have been demonstrated in previous important studies. The objective of this study is to analyze the preliminary outcomes of women booked on the birth centre during its first year.

A prospective, descriptive study was conducted from December 2017 to November 2018 to determine mode of delivery, intrapartum and postpartum transfer rates and perinatal outcome. From 240 women that showed interest on the Birth Centre, 111 were recruited at 36 weeks of pregnancy for an initial antenatal visit where the risk of the pregnancy was assessed. Women with low and medium risk pregnancy were eligible to give birth in the midwifery unit. Specific information was collected from the first 36 weeks visit until discharge: demographic factors, medical history, obstetric background, birth plan, breastfeeding, labour, delivery and postpartum details. Excel analytical tool was used for data entry, manipulation and statistical analysis.

From 111 women, 21.6% were excluded after the first visit; 87 women were eligible to give birth in the Birth Centre and 63% were admitted in spontaneous active labour. The overall intrapartum transfer rate was 22%, all of them were nulliparous women. Most transfers were non emergent, with 1.81% of newborns requiring emergent transfer after birth. There were no maternal or neonatal deaths. Information on modes of delivery was available for the 55 women who were admitted in the Birth Center in labour. 78.18% had a natural vertex delivery, 10.09% had an instrumental delivery 9.09% had an emergency caesarean section and 1.81% had a vaginal delivery with epidural.

This study corroborates the results from previous research in safety and place of birth and it shows the interest of women in this type of midwifery led care model. The intervention rate is minimum and the percentage of intrapartum transfer is slightly less than the studies performed in other countries, but we must have into account that this is a small homogeneous sample. More data should be collected in the following years to increase the validity of the results.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 253

TITLE: REVIEW OF STILLBIRTH CASES

AUTHORS: N. Murugandoss 1; S. Phillips 1; E. Szubert 1; D. Paraschiv 1

AFFILIATIONS: Obstetrics Department, King's College Hospital, London, U.K.

CONTENT:
The stillbirth rate across the UK was 3.93 per 1000 total births as per the MBRRACE – UK report in 2016. The aim of this review was to evaluate the stillbirth rate in our obstetric unit, to stratify the causes for fetal loss, to establish whether we were compliant with the local care guidelines, to explore the possibilities to reduce the stillbirth rate and to improve the services surrounding bereavement care in future.

All patients who had stillbirths (babies born ≥ 24 weeks of gestation including medical termination for fetal anomalies) were included in the study. The study period was from January 2017 to December 2017. There were total of 32 patients who had stillbirths in 2017. The data for the study period was collected from the bereavement midwives’ records, from the Electronic patient’s records and from Badger net (web based maternity information system). Notes were available for 25 patients. The data was collected on the predetermined audit proforma and analysed on Microsoft Excel.

Our stillbirth rate for 2017 was 6.39/1000 total births. We had two groups of patients: Stillbirths due to fetal anomalies – 11 (all were preterm) and stillbirths due to other causes – 21 (13 were preterm and 8 were term). All patients in the fetal anomaly group had feticide. There were 2 intrapartum stillbirths. Postmortem examination was performed for 12 babies and 2 had limited postmortem. The cause of stillbirth was explained in 76% of our cases. We were compliant with the induction of labour protocol and with cabergoline administration where applicable. 66% of patients had follow-up appointment with their consultants. 5 patients were referred to counselling services. All cases were reported to MBBRACE – UK.

Our obstetric unit is a tertiary referral centre for Fetal Medicine which explains the increased rate of stillbirth in our unit (2/3 of patients with fetal anomalies were referred from abroad). In our unit, the cause for about 3/4 of stillbirths was explained. Better interpretation of the intrapartum fetal monitoring may reduce the fetal loss during labour. All patients were offered follow-up by a specialized bereavement team.

COI Disclosure: None declared
This study aimed to examine the relationship between perceived social support and spousal support of women in the postpartum period and their readiness for discharge from hospital. The sample of the research, conducted in Turkey, included 389 women who had given birth in a public hospital located to the east and had accepted to participate in the research. The data were collected between September 2018 and December 2018 and by the researcher using the Personal Information Form, Readiness for Hospital Discharge Scale, Multidimensional Scale of Perceived Social Support, and Perceived Spousal Support Among Women in Early Postpartum Period. Multiple linear regression was used to examine the predictors of the readiness of women in the postpartum period.

85.6% of the participants were women who had vaginal birth and 14.4% had cesarean section. The mean age of women was 27.45 ± 5.49 and the mean number of pregnancies was 2.51 ± 1.43 years. The mean score of the Readiness for Hospital Discharge Scale was 171.41 ± 28.55. 90.2% of women stated that they were ready for discharge from hospital. Multiple linear regression model showed that perceived social support, spousal support, and number of living children were the most important factors affecting women's readiness for discharge from hospital (respectively β=.130, β=.261, β=.176; p<0.05 for all).

The findings show that as women's perceived social support and spousal support increase and the number of children increases, there is an increased likelihood of discharge from the hospital.

COI Disclosure: None declared
In this presentation I will focused on Women centred care.
I would like to demonstrate how the Alliance of Bulgarian Midwives has been working for the past eight years to improve and put woman in centre of the care.
The midwives in Bulgaria have very restricted competence in comparison to other midwives in the Europe.
Antenatal and postnatal care are delivered only with the Obstetricians, even in Physiological pregnancy and birth.
Midwives can not get contract with National Health Insurance.

What we did to be able to work?
Alliance of Bulgarian Midwives has organised many information campaigns, one of them is, “Midwives-near Mom’s” - being sponsored by Companies. Lectures are organised in almost every town, once or twice a month. In this lectures midwives, advising, consulting and supporting women.
Hospital „Sheinovo” - city of Sofia, officially offer midwifery based maternity service, working in partnership with women - give the necessary support care and advice during pregnancy, labour and the postpartum period; as a result the rate of Caesarean section has dropped significantly comparing with the antenatal service provided by the Obstetricians in this Hospital. Midwifery one-to-one support in labour have been offered in some Hospitals.

Alliance of Bulgarian Midwives has future plan in place.
- to adopt European and World Health Organization standards for midwifery.
- support woman’s to make an informed decision.
- respect woman’s human rights.
- midwives and Obstetricians working together in a positive relationship with women.
- women who have no complications are low risk pregnancy and birth to be support in a midwifery settings.
- women-centred care, access, choice and continuity - principles of patterns of practice for the new midwifery.

COI Disclosure: None delivered.
TOPIC: WOMEN CENTERED CARE

ID: 327

TITLE: SIGNIFICANCE OF TNF-α AND RANTES CONCENTRATION IN VAGINALLY OBTAINED AMNIOTIC FLUID IN PREDICTING FETAL INFLAMMATORY RESPONSE SYNDROME

AUTHORS: G. Balciuniene 1,2, D. Ramasauskaite 1,2, G. Drasutiene 1,2, I. Pilypiene 1,2, V. Gulbiniene 2, D. Bartkeviciene 1,2, A. Zinkeviciene 3, I. Girkontaite 3, I. Dumalakiene 3

AFFILIATIONS: 1 Institute of Clinical Medicine of the Faculty of Medicine of Vilnius University
2 Vilnius University Hospital Santaros Klinikos, Center of Obstetrics and Gynaecology
3 State Research Institute Centre for Innovative Medicine

CONTENT:
Preterm premature rupture of membranes (PROM) occurs in 3 perc. of pregnancies and is associated with the fetal inflammatory response syndrome (FIRS). The choice of PROM management requires balancing the benefits of pregnancy prolongation and the risk of FIRS.

The objective: to determine the predictive value of tumor necrosis factor-α (TNF-α) and the chemokine CCL5 also known as RANTES (regulated on activation, normal T cell expressed and secreted) in vaginally obtained amniotic fluid for FIRS.

A prospective case-control study was conducted. Amniotic fluid was obtained vaginally from 90 women with preterm PROM less than 24 hours before delivery. Amniotic fluid TNF-α and RANTES levels were measured by an immunoenzymatic assay. Participants were divided into a control and a case group according to presence of FIRS. Multivariate logistic regression was performed to determine the independent relationships of TNF-α, RANTES and FIRS. The receiver operating characteristic (ROC) curve was used to identify the best cut-off values for independent factors in predicting FIRS. The optimal cut-off values were obtained from the Youden index maximum. The corresponding areas under the ROC curves were calculated and compared.

Median concentrations of amniotic fluid TNF-α and RANTES were significantly higher in group with FIRS than in control group (97.89 pg/mL vs. 10.98 pg/mL, p-value = 0.06 x 10^-6 and 184.92 pg/mL vs. 67.52 pg/mL, p-value = 0.002, respectively). The optimal cut-off value for amniotic fluid TNF-α in relation to FIRS was 39.46 pg/mL (sensitivity 87% and specificity 73%) and RANTES – 163.94 pg/mL (sensitivity 50% and specificity 84%). The area under the ROC curve of TNF-α and RANTES was 0.83 and 0.69, respectively. The areas under the ROC curves of TNF-α and RANTES were significantly different (p-value = 0.048).

The cut-off value of 39.46 pg/mL for TNF-α and 163.94 pg/mL for RANTES in vaginally obtained amniotic fluid seems to be a good predictive factor for fetal inflammatory response syndrome in pregnancies with preterm premature rupture of membranes. TNF-α seems to have better predictive value for FIRS than RANTES.

COI Disclosure: None declared
TOPIC: WOMEN CENTERED CARE

ID: 344

TITLE: HISTORICIZING PLACES OF BIRTH SINCE 1980S. NEW WOMEN’S DEMANDS, INNOVATIVE MEDICAL APPROACHES AND GLOBAL CIRCULATION OF PRACTICES

AUTHORS: S. Morano; E.Betti

AFFILIATIONS: DINOGMI Department, Genoa University

CONTENT:
The paper is based on the results of the on-going project: Rethinking places of birth in historical perspective funded by the University of Genoa. It historicizes the development of places of birth in the last forty years from different perspectives, namely: women’s demands, innovative medical approaches, global circulations of best practices.

The research has a qualitative character, belonging to the realm of history. It intersects women’s history, the history of medicine and the history of public health, with a particular attention to the forms and processes of birth medicalization from the mid-20th century to the new Millennium. The Italian case, the empirical case study, will be contextualized in the European context, paying attention also to exchanges occurred with other Western countries. The research takes into account as main sources: archival documents, mainly preserved at the University of Genoa but also in women's archives, and oral sources (especially interviews with different generations of midwives and obstetricians) collected during the research itself.

The research analysed the exchanges occurred since the 1980s between midwives and obstetricians, leading to innovative medical approaches. Archival documents have proved to what extent the 1980s were relevant in creating a European discussion on the renewal of childbirth practices and places of birth. The role of the second-wave feminism was crucial in the creation of the first network of BCs in the US and the UK. International movements, national and local associations have played a relevant role in fostering such new visions. The study of the Genoa case revealed that Italian midwives became the targets of innovative training courses developed thanks to international exchanges, at the base of the establishment of BCs in the 2000s.

The study of the alongside Italian BCs, contextualized in the European context, clearly show how the global circulation of practices was crucial towards creating a new vision for 21st century places of birth, which combined tailored physical spaces with innovative practices. The role played by the Genoa BC was relevant towards stimulating the creation of other BCs in Italy and promoting a more “humanized” birth approach also in traditional hospitals, as a more general trend in the New Millennium.

COI Disclosure: None declared
This study conducted to determine the relationship between the self-perception of pregnant women and prenatal breastfeeding self-efficacy.

The sample of the present study consists of 385 volunteer pregnant women who applied for their routine controls at a public hospital between November 2018 and February 2019. Data were collected using the Personal Information Form, Self-perception of Pregnants Scale (SPPS) and "Prenatal Breastfeeding Self-Efficacy Scale (PBSES). In the evaluation of the data, "number, percentage distributions, mean, standard deviation, independent t-test, one-way ANOVA, Tukey and correlation" tests in the SPSS (25.0) statistical package program were used.

The mean age of the pregnant women has been determined 29.80±5.76, %32.7 is high school graduate, %85.7 is household lady, %73.8 is in middle level of economic situation and %82.1 is a core family. The mean gestational week is 32.16±7.45 and 2.51±1.34 number of pregnancies. It was determined that the mean score of the subscale of 'Maternity Perception' was 25.58±3.54; The mean score of the subscale of 'Body Perception' was 8.94±3.80; The average score they receive from PBSES was 83.85±11.12.

It was determined that breastfeeding self-efficacy increased significantly as pregnancy perception of maternity increased.

**COI Disclosure:** no