ID: 727
TITLE: CLINICAL PROTOCOL & RESEARCH PROCESS OF STOCKHOLM PRETERM INTERACTION-BASED INTERVENTION, SPIBI
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CONTENT:
Extremely preterm (EPT) born children are at increased risk of cognitive and neurodevelopmental impairment, neuropsychiatric disorders and academic difficulties. Parents of EPT born children are extra vulnerable for anxiety, posttraumatic stress disorder and depression and the parent-child interaction is negatively affected by prematurity. There is some evidence that early interventions have beneficial effects on neurocognitive and motor outcomes (Spittle A et al 2015). Based on a previous intervention (Verkerk G et al 2012) and adjusted to the Swedish context with 480 days paid parental leave, we created a post-discharge intervention, SPIBI, for families of EPT born children.

The aim of SPIBI is to improve the quality of the parent-child interaction, child development and parental mental health in families with EPT born children. SPIBI is a randomized controlled beginning at discharge and lasting until the child is 12 months corrected age. The trial design is a two arm randomized trial with four recruiting sites in Stockholm. Intervention group (target, n=65) receives 10 visits and two telephone calls from a trained interventionist and the control group (target n=65) receives treatment as usual plus an extended follow-up program. The SPIBI-team has recruited and trained 6 multi-professional and NICU-experienced interventionists. The training takes one year (0.2 of full time) and the content was both theoretical and practical, including pilot-cases.

SPIBI is an ongoing research project, beginning the 1st of September 2018 and planning to end recruitment the 31st of August 2020 and finishing the home-visits in August 2021. By the end of April 2019, 33 eligible infants had been identified within the four neonatal units in Stockholm; of which 26 children approved and 7 children declined participation. At this stage, three children have dropped out of the study, because of severe social challenges and child death. Identified challenges have been social and medical vulnerability of the EPT-families, finding the optimal multi-professional balance of motoric, psychological, pedagogical and medical kernels of the intervention, ethical considerations when to ask families for participation, lack of long-term discharge-planning of the neonatal units and large geographical spread of NICUs as well as families.

In conclusion, the protocol seem to be feasible and appreciated by parents in the target group. With regard to the small recruitment base, trials of this kind needs a long inclusion time. Since EPT-children and their parents displays a wide scope of difficulties and challenges, multi-professional cooperation is preferable, placing high demands of sensitivity, professional respect and time for long collaborative processes.

IMAGES: https://www.eiseverywhere.com/eselectv3/v3/events/351149/submission/files/download?fileID=3b5ceca818a1037aa24b1009a0c3cb2e-MjAxOS0wNSM1Y2UyNjJY2Y2QwMjE1

Figure 1. The fundamental content & cornerstones of SPIBI summarized in a house-metaphor.

COI: None declared
ID: 891

TITLE: OBSTETRIC MANAGEMENT, COMPLICATIONS AND OUTCOMES OF BIRTH AT EXTREMELY PRETERM GESTATION: A SINGLE CENTRE’S EXPERIENCE

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CONTENT:

Obstetric management to reduce neonatal and maternal morbidity of extremely preterm (EP) delivery (22-26 weeks gestational age (GA)) requires appropriate counselling of mothers-to-be. Current evidence for best practice is limited and often focuses on neonatal outcomes. We retrospectively evaluated data regarding labour and delivery from women booked at University College London Hospital (UCLH; ~6500 deliveries/year). We aimed to describe management and short term (maternal and fetal) outcomes and, in particular, to quantify perinatal complications occurring at EP gestations. This will help inform parental counselling and aid clinicians in developing management plans.

Women with a live fetus at admission to UCLH and in labour or when a decision was made to perform Caesarean section, who delivered at 22-26 weeks GA (1st January 2011-31st December 2013) were included. Case identification used maternity and neonatal admission logs. We collected data on obstetric interventions (ultrasound, cardiotocograph), antenatal steroids (ANS), tocolysis and magnesium sulphate (MgSO4), labour management, and maternal, fetal and neonatal complication via hospital pathology, imaging and neonatal clinical databases cross-referenced with case notes and discharge summaries. Descriptive analyses comparing singleton and multiple pregnancies and women with and without medical complications are reported on a per-baby or per-mother basis, as appropriate, with a cutoff of p<0.05.

Of 132 women, 103 had singleton and 29 (53 live fetuses) had twin pregnancies. Pre-existing medical problems occurred in 30 (23%) women, 110 (83%) had antenatal complications; only 17 (13%) women experienced neither. Postnatal complications (eg post-partum haemorrhage, sepsis, ITU admission) occurred in 35 (27%) women; no statistical differences were seen by twin status or by pre-existing or antenatal obstetric complications. 151 fetuses (97%) were exposed to ANS, 24 (15%) to tocolysis and 70 (45%) to MgSO4. Delivery complications affected 11 fetuses, with 12 deaths in labour or in the delivery room; survival to discharge was 75% (117/156) and increased with GA: 25% (1/4), 75% (18/24), 69% (29/42), 73% (33/45) and 88% (36/41) at 22, 23, 24, 25 and 26 weeks GA respectively (p=0.024). No statistically important impact was seen from twin status, maternal illness or obstetric management.

Despite birth in a large regional referral centre for EP delivery, mothers and fetuses had a high rate of complications. The results support timely transfer of women to a centre with appropriate obstetric and neonatal expertise, and highlight the importance of a team approach by clinicians. Antenatal and postnatal maternal complications were common, emphasising the need to include maternal as well as neonatal outcomes when examining EP birth.

COI: None declared.