However, TO seemed to have a negative effect on tissue damping and elastance indicating increased tissue forces.

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ROLE OF ORAL SUCROSE IN REDUCING PAIN TO OROGASTRIC TUBE INSERTION IN PRETERM NEONATES

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Background and aims: The practice of orogastric tube insertion has become quite popular in NICU's over the years. The present study was undertaken with an aim of assessing the pain associated with orogastric tube insertion across gestational age subgroups and the effect of oral sucrose on decreasing this pain.

Methods: A double blind randomised controlled trial was carried out with predefined inclusion and exclusion criteria. A total of 120 babies (60 in each limb) were randomised 2 minutes prior to the procedure and administered orally either a sterile solution of 24% sucrose or double distilled water according to the randomisation codes. The procedure involved putting an 6 Fr Orogastric tube (OGT). The whole procedure was video recorded and a non invasive vital signs monitor was also connected. The pain response to OGT insertion was measured by calculating the Premature Infant Pain Profile (PIPP) Scores. Results were analysed using SPSS version 17. Mean and SD were calculated. Chi square test and unpaired and paired student's t test were used.

Results: There was no significant difference between the baseline characteristics of the 2 study groups. In neonates > 32 weeks of gestation a significant measurable painful response to OGT insertion was seen whereas this was absent in the group < 32 weeks of gestation. The mean post 30 second PIPP score in the sucrose group was significantly lower as compared to the placebo group. No other difference was observed.

Conclusions: In neonates >32 weeks of gestation, orogastric tube insertion is associated with measurable pain perception. Prior 24% oral sucrose transiently alleviates this pain.

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PREDICTIVE VALUE OF CLINICAL SIGNS IN LATE-ONSET SEPSIS (LOS) IN PRETERM NEONATES

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Background: Accurate diagnosis of LOS in preterm neonates is a major challenge because clinical signs are aspecific leading to unnecessary antibiotic treatment.

Aims: To determine the predictive value of clinical signs for identifying LOS in preterm infants.

Methods: In all patients < 34 weeks GA with suspected LOS in a NICU, 14 clinical signs (pallor/gray skin, capillary refill >2 seconds, dys/tachypnea, increasing oxygen-need, tachycardia, thermal instability, hyper/hypothermia, feeding difficulties, increasing apnoeic spells, lethargy and irritability) and 4 risk factors (gestational age (GA), weight, sex, central venous catheter (CVC), mechanical ventilation, postnatal age) were prospectively assessed. LOS was defined as bloodculture-proven sepsis occurring after 3 days of age.

Results: LOS was diagnosed in 28% of 180 episodes of suspected infection, occurring in 142 neonates (mean GA 30⁺³ ± 2⁺² weeks). Only 3 signs were significantly associated with LOS: deterioration of respiratory condition (OR 3,2; 95%CI 1,6-6,3), capillary refill >2 seconds (OR 2,9; 95%CI 1,5-5,7) and lethargy (OR 4,4; 95%CI 2,2-8,7). Multiple regression resulted in a model with these 3 signs and the presence of a CVC (AUC 0,828; 95%CI 0,764-0,892, p< 0,001). In the absence of these 4 factors, LOS was found in 2,3% (1/43). In case of one or more of the 4 factors sensitivity was 98%, specificity 32%, positive LR 1,45 and negative LR 0,06.

Conclusion: Deterioration of respiratory condition, capillary refill, lethargy and the presence of a CVC are the most important clinical signs in predicting LOS in preterm infants. In the absence of all these signs probably antibiotics can be safely withheld.