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can serve as an additional therapeutic device handling insulin requiring gestational diabetes. Due to the burning of the increased blood glucose both an improved glucose utilization and a growing insulin sensitivity on the cellular level can be achieved. Physical activity can also be used in preventive and therapeutic ways to diminish labour pain, as a recent study by the authors mentioned above has just revealed. Apart from this analgetic effect, physical exercise on an ergometer also enhances contraction frequency, thereby having a favourable effect on progress during parturition.

RANDOMISED CONTROLLED TRIAL OF MORPHINE VS. PHENOBARBITONE FOR NEONATAL ABSTINENCE SYNDROME REQUIRING PHARMACOLOGICAL INTERVENTION.

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Background: Neonatal Abstinence Syndrome (NAS) is a syndrome of drug withdrawal observed in infants delivered to mothers dependent on physically addictive drugs and is increasing in incidence worldwide. In the United Kingdom the incidence is higher in socially deprived urban areas. Glasgow Royal Maternity Hospital (GRMH) serves such a population and has faced a 10-fold increased incidence of NAS over the last decade. Seventeen percent of admissions to the Special Care Baby Unit (SCBU) are now due to NAS, which has consequences for infants, families and clinical workload. Pharmaceutical intervention remains the mainstay in managing moderate-to-severe NAS but optimal therapy remains controversial and regimens vary widely. We compared the efficacy of opiate-replacement therapy (Oramorph) with our current first-line treatment (Phenobarbitone) for symptomatic NAS. Predetermined clinical end-points were duration of pharmaceutical treatment, requirement for second-line pharmaceutical treatment and admission to SCBU.
Methods: A clinical diagnosis of NAS was confirmed by excluding differential diagnoses. Inclusion for study was determined by the Lipsitz Score, a reliable and validated method for categorising NAS severity. Two sequential Lipsitz Scores exceeding 4 fulfilled entry criteria. Thereafter, infants were allocated to Oramorph or Phenobarbitone by a randomly-generated sequential envelope technique. Both treatments were identical in appearance, odour and volume and participating staff remained blinded to the identity of each drug. Drug dose increments, decrements and discontinuation were protocol driven.
Results: Seventy-five infants were randomised for study. All mothers were receiving opiate-replacement therapy (Methadone) during pregnancy and additionally misused other drugs. No difference was identified in maternal drug misuse between those allocated to either treatment. Infants receiving Oramorph required 5.5 fewer days treatment than the Phenobarbitone group (11.9 vs. 17.4 days, p=0.02 Mann-Whitney U-test). The Phenobarbitone group required second-line treatment more frequently (47% vs. 35% p=0.11 trend, Chi2) and were more frequently admitted to SCBU (62% vs. 30%, p=0.045 Chi Square). In those admitted to SCBU there was no difference in the duration of pharmacological treatment between groups (p=0.33, Chi2).
Conclusions: Opiate-replacement therapy is the superior treatment for NAS in this group of infants and may reflect the universal misuse of opiates amongst drug-misusing mothers in Glasgow. The shorter duration of pharmacological treatment and fewer SCBU admissions observed with opiate-replacement therapy has significant cost implications for neonatal units. We would suggest that tailoring the treatment of NAS according to local drug misuse demography is likely to obtain similar benefits to those noted above.

ROLE OF CITOKINES (IL-1b, IL-6, AND IL-8, TNFa, AND sIL-2R) AND C-REACTIVE PROTEIN IN THE DIAGNOSIS OF NEONATAL SEPSIS.

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Objective: To examine whether the plasma levels of interleukin (IL)-1b, IL-6, IL-8, TNF-a, and the soluble IL-2 receptor (sIL-2R) could be useful in the diagnosis of neonatal sepsis, and whether its combination with classical markers, such are CRP and white blood cell (WBC) count, increases its diagnostic usefulness.
Patients and Methods: Blood samples were collected at admission in 40 neonates with clinical signs of infection. Patients were allocated to different groups according to the bacteriological and laboratory results: Group I consisted of 20 newborns with positive blood culture and other biological test highly suggestive of infection (CRP > 1.5 mg/dl, and/or abnormal WBC count. In Group II were included 20 neonates with negative blood culture and biological test