FCP5

PHYSIOLOGICAL, HORMONAL AND METABOLIC RESPONSES TO A SINGLE MIDAZOLAM DOSE IN INTUBATED AND VENTILATED PRETERM NEONATES

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Objective: To determine the response of ventilated preterm neonates to a single dose of midazolam given before intubation.
Methods: In a prospective, randomized, placebo controlled trial 20 mechanically ventilated preterm neonates (<36 weeks) were studied before medication and intubation and 60 minutes after administration of midazolam or placebo. Patients were eligible if they required intubation and ventilatory support within 12 hours after birth. Exclusion criteria included major congenital anomalies, perinatal asphyxia and receiving analgesics and sedatives. Physiological responses recorded during each period were heart rate, arterial blood gases, ventilator settings. As metabolic and hormonal parameters, blood glucose and serum cortisol levels were measured before and 60 minutes after administration of midazolam as metabolic and hormonal parameters.
Results: In the study group, before intubation all patients had respiratory insufficiency measured in blood gases. Infants characteristics, blood glucose and serum cortisol levels were similar for the neonates who randomly were given midazolam and placebo. All infants presented high basal levels of cortisol before any medication, which indicated the presence of stress (in the midazolam group: 793.5±857.6, placebo group: 1956.9±2026.1 nmol/L). In the midazolam group, patients had significantly lower levels of serum cortisol after administration of midazolam compared to the basal levels (740.8±378.5 vs 793.5±857.6 nmol/L). In the placebo group serum cortisol levels were higher than basal levels but the difference was not significant.
Conclusion: Before intubation and mechanical ventilation a single dose of midazolam reduces the serum cortisol levels in preterm infants.

FCP6

EXPERIENCE WITH NEONATAL EXCHANGE TRANSFUSION IN NORTHERN JORDAN

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A review was conducted at Princess Rahma Pediatric Teaching Hospital during the past 6 years."386" Exchange Transfusion (ET) for neonatal hyperbilirubinemia were performed on "336" neonates.
- Only 25 babies(7.4%) were premature and the rest were full term. - (11.6%) required more than ET.
- ABO incompatibility with concomitant G6PD deficiency (19.3%).
- G6PD deficiency (18.8%).
- Rh. compatibility (11.9%).
- and Sepsis (8.6%).were major causes for ET.
- Complications occured in (14.7%) as : anemia,bradycardia,sepsis,cardiorespiratory arrest.
- We conclude that G6PD deficiency is significant cause of ET in our neonates either alone or concomitant with ABO isoimmunization.
- We advocate the use of prophylactic phototherapy for neonates B.wt.<2000 gm.
- and we recommend he use of antibiotics post-exchange transfusion to reduce sepsis.