

---

# **The effect of intravenous oxytocin infusion during labour on maternal and cord serum sodium, potassium, urea and creatinine levels**

**Ahmed El Sayed Hussein Abu Ward**

Oxytocin infusion during labour is not always safe for the mother nor her newborn infant. This was proven by many reports which described the occurrence of water intoxication and hyponatremia in mothers which were transmitted transplacentally to the fetus who may suffer after birth from apnoea. In our study we found that administration of oxytocin and glucose 5% by infusion method during labour in minimal doses cause significant lowering in serum sodium levels in the mothers and in their newborn infants, while serum potassium and creatinine levels in mothers and in their newborn infants show no significant changes. Also we found that serum urea levels in mothers and in their newborn infants were significantly lowered, although of no clinical significance, after administration of oxytocin and glucose 5% during labour. On administering oxytocin and normal saline instead of glucose 5% in minimal doses during labour, we found that serum sodium level is not affected neither in mothers nor in the newborn infants meaning that glucose 5% solution augments the hyponatremic effect of oxytocin while saline 0.9% prevents it.