Introduction

To the pediatrician and family practitioner, jaundice remains the most common and, perhaps, the most vexing problem in the well baby nursery *(Maisels et al., 1988)*. It has been suggested that the use of oxytocin in the managment of labour may be a Causative factor *(Ghosh and Hudson, 1972, Davis et al., 1973)* though this has not been found by the others *(Mc Connell et al., 1973)*.

A relation between oxytocin administration during labour and subsequent development of neonatal jaundice was first suggested by *Mast et al., (1971)*. *Davis et al., 1973* Showed that infants of mothers whose labours were induced with oxytocin develop higher mean serum bilirubin levels than infants whose mothers received oxytocin to accelerate spontaneous labour or infants whose mothers did not receive oxytocin.

There is a higher significant association between the mean total dose of oxytocin used for induction and the incidence of neonatal jaundice where the incidence of neonatal jaundice increased sharply when the total dose of oxytocin exceeded 20 units *(Beazly and Alderman, 1975)*. A prospective study done by *(Singhi*

and Singh, 1982) implicated the concomitant administration of large quantities of electrolyte free dextrose solution as a contributory factor in the proposed pathogenetic mechanism.

The association between oxytocin induced labour and neonatal hyperbilirubinemia has been attributed to hepatic glucuronyl transferase immaturity, anoxic liver damage, enhanced placentofetal transfusion, increased red blood cell fragility and mechanical damage to red blood cells *(Buchan, 1979)*.

Hamad et al., (1982) found that the peak of hyperbilirubinemia was in the third day postnatally then gradual decrease of serum bilirubin occurred. Another study done by *(Ghosh and Hudson, 1972)* found that the peak of hyperbilirubinemia in cases that had received oxytocin tended to be later.

There is significant positive relationship between hyperbilirubinemia and low birth weight, oriental race, premature rupture of membrane, breast feeding, neonatal infection, use of the "Pill" at the time of conception, instrumental delivery and history of first trimester bleeding, while maternal smoking and black race are negatively related to hyperbilirubinemia *(Linn et al., 1985)*.

It is interesting to observe that the sex of the newborn could affect the level of serum bilirubin when ***Pocock and Turner (1982)***, found that girls born to mother given oxytocin were more prone than boys to neonatal hyperbilirubinemia. While the data obtained by ***Lange et al., (1982)*** did not support these finding. On the contrary, they found that males are more Prone to neonatal jaundice.

Caesarean section is associated with lower serum bilirubin levels ***(Calder et al., 1974)*** because those infants are likely to receive a minimal transfusion, early clamping of the cord or both. ***(James, 1966)***.