ABSTRACT

TITLE: “MATERNAL AND PERINATAL OUTCOMES OF PREGNANCIES WITH ISOLATED BORDERLINE OLIGOHYDRAMNIOS VERSUS UNCOMPLICATED NORMAL AMNIOTIC FLUID INDEX”

Background and objectives:

In some instances the volume of amniotic fluid may fall far below the normal limits. Amniotic fluid is measured using amniotic fluid index. Borderline Oligohydramnios is defined as amniotic fluid index of five to eight centimetres. Various methods like non-stress test, acoustic stimulation, and foetal Doppler velocimetry are helpful in assessment of foetal well being and identifying those pregnancies at risk of adverse perinatal outcome.

Various studies have shown increased incidence of adverse perinatal outcome like foetal distress, meconium stained liquor, low Apgar score, low birth weight, neonatal morbidity and mortality. This study is undertaken to know the adverse perintatal outcome in pregnancy women with borderline oligohydramnios and to evaluate the value of AFI in predicting the subsequent foetal distress and caesarean delivery.

Methods:

This is a prospective case control study done for a period of twelve months at PSG IMS &R, coimbatore. It consists of analysis of pregnancy outcome in 60 cases with diagnosis of borderline oligohydramnios by ultrasound in third trimester compared
with 60 controls with no oligohydramnios and matched for other variables like age, parity, gestational age and any pregnancy complication. Inclusion criteria are Singleton pregnancy, AFI between 5.1 to 8 cm, Antenatal mothers in third trimester and exclusion criteria are medical co morbidities like diabetes, hypertension, overt hypothyroid, preeclampsia and multiple pregnancies, premature rupture of membranes

Various outcome results were recorded and tabulated. The results were statistically analysed using parameters like mean, standard deviation and chi square test.

Results

There was significant difference between two groups in occurrence of non reactive and reactive NST pattern. There is increased incidence of labour induction in women with AFI 5-8cm and than women with AFI >8cm. There is increased rate of caesarean section in pregnant women with borderline oligohydramnios. There is increased occurrence of low birth weight (≤2.5kg) in women with oligohydraminos.

Conclusion

An amniotic fluid index of 5-8cm detected in third trimester is an indicator of poor perinatal outcome. Determination of AFI can be used as an adjunct to other foetal surveillance methods. Determination of AFI is a valuable screening test for predicting foetal distress in labour requiring caesarean section.

Key words: Oligohydramnios; Amniotic Fluid Index; Amniotic Fluid Volume;
Foetal Acoustic Stimulation Test; Lower Segment Caesarean Section, Ultrasonogram;
Visual Acoustic Stimulation Test; Foetal Heart Rate; Non Stress Test