ABSTRACT

Background:

Amniotic fluid provides a protected milieu for the growing fetus, supplying nutrients facilitating growth, movement and cushioning the fetus against mechanical and biological injury and it helps to avert compression of umbilical cord. Reduction in the volume of amniotic fluid is called oligohydramnios. Oligohydramnios in third trimester is associated with non-reassuring fetal heart pattern, increased labour induction, meconium aspiration syndrome, still birth and neonatal death.

Objective:

This present study is undertaken to assess the effect of intravenous maternal hydration therapy in third trimester oligohydramnios and to assess the perinatal outcome.

Methods:

A prospective study on the effect of intravenous hydration therapy in cases of third trimester oligohydramnios and its effects on perinatal outcome was carried out in, Government Stanley Medical college, Chennai – 1 150 patients in third trimester pregnancy with oligohydramnios in one group and 150 normal pregnancy patients in third trimester were taken as control group. Maternal hydration in the form of isotonic Ringer lactate solution 1000 ml/day was given intravenously every day to the oligohydramnios group of patients. Maternal hydration is continued till 37 completed weeks or tests indicate serious fetal compromise or the Fetus has reasonable chances of survival.

Main Outcome Measures:

Effect of intravenous hydration by means of increase in amniotic fluid index(AFI), and the perinatal outcome between intravenously hydrated oligohydramnios cases, and normal pregnant cases are noted.

Results:

In a study group post treatment AFI was found to be significantly increased ( P =<0.001). In this present study there is no statistical difference in perinatal outcome between the hydration therapy received study group and the control group

Conclusion:

Intravenous maternal hydration therapy with isotonic solution significantly increases AFI in third trimester oligohydramnios and is not associated with any adverse maternal outcomes. Intravenous maternal hydration therapy in third trimester oligohydramnios is associated with as similar perinatal outcome as in patients with normal AFI in third trimester.

Keyword:

AFI = Amniotic Fluid index.