The role of antepartum transabdominal amnioinfusion in management of oligohydramnios

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Object: To evaluate the roles related to prophylactic transabdominal amnioinfusion in pregnancies with oligohydramnios.

Study design: Thirty-nine Pregnant women with oligohydramnios amniotic fluid index (AFI < 5) and intact membrane hospitalized for oligohydramnios and submitted to transabdominal amnioinfusion between 18 and 35 weeks' gestational age, and were matched retrospectively with a historic 'control' group of 39 women treated conservatively. Eleven women of the amnioinfusion group had ruptured membranes (pPROM group)

Results : Sixty-two procedure was done in 39 wemens and the mean pre- procedure AFI was 2.1cm and post-procedure AFI was 10.1cm. The mean first infusion to delivery interval was 32 days. The amniotic fluid index increased from a median value of 2.1 to 10.5 cm in amnioinfusion group after amnioinfusion. Both study and control group showed a similar rate of cesarean delivery (10 vs14, respectively). but the number of cesarean sections for fetal distress was more frequent among control group than among amnioinfused patients (4/14 vs. 1/10 in amnioinfusion group). Amnioinfusion group showed a better mean umbilical arterial pH at delivery (7.30 \pm 0.12 vs. 7.28 \pm 0.11, p<0.05) and lower base deficit (-1.8 vs. -6.9 in control group). No significant difference was observed in maternal or neonatal hospitalization days or infections morbidity except more maternal fever in pPROM group.

Conclusion: Our data suggest that the amnioinfusion seems to be a low fetal and maternal risk technique than conservative management. On the contrary, this procedure seems to offer several benefits to pregnant women of oligohydramnios with ruptured and unruptured amniotic membranes.

Keywords: Transabdominal amnioinfusion; Oligohydramnios