



PPROM: perinatal outcome after serial amnioinfusion

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Objective

To evaluate the impact of serial transabdominal amnioinfusion procedure on perinatal and neonatal outcomes of pregnancies complicated with very early preterm premature rupture of membranes.

Methods

The records of 14 patients who were diagnosed very early preterm premature rupture of membranes and managed with serial transabdominal amnioinfusion procedure were reviewed retrospectively during the period between April 2014- February 2016 at Inonu University School of Medicine Department of Obstetrics and Gynecology. In the study period, serial transabdominal infusion procedure option was offered to all patients who were diagnosed very early preterm premature rupture of membranes and met the following criteria: (1) Singleton viable pregnancy (2) Gestational age 16 + 0 to 24 + 0 weeks (gestational age confirmed by the first trimester or early second trimester ultrasonography) (3) Lack of labor (absence of uterine contractions during hospitalization). The amnioinfusion procedure were carried out with 20-gauge amniocentesis needle guided by transabdominal ultrasound to amniotic cavity by giving 37 °C heated saline solution.

Results

The median number of amnioinfusions performed was 4 (mean 4, 66; range 1-10). There were 4 neonatal death in these patients. Neonatal deaths were attributable to respiratory problems due to extreme prematurity and/or pulmonary hypoplasia. Although there were detected 2 chorioamnionitis in perinatal period and one of these patient's baby was exposed culture positive neonatal sepsis, there were no death occurred because of infection. The rate of respiratory support requirement was 71, 4% and the median duration of respiratory support was 2 day (mean 6, 28; range 0-30) while the median duration of hospitalization in neonatal intensive care unit (NICU) was 19 day (mean 30, 42; range 0-89). The overall survival rate were detected 71, 5%.

Conclusion

Serial transabdominal amnioinfusion procedure could be a management option in pregnancies complicated with very early premature rupture of membranes. Before considering this management option, comprehensive counseling of parents should be done about the expected benefits and possible adverse effects of procedure on maternal and neonatal outcomes.