

Original Paper

Effect of antenatal Betamethasone on prevention of respiratory distress syndrome among neonates with gestational age of 35-36 weeks

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Abstract

Background and Objective: Respiratory distress syndrome is the most important lung problem during the neonatal period. Although the benefits of antenatal corticosteroids in neonates with a gestational age of less than 34 weeks have been demonstrated, the benefit of this treatment in neonates with higher gestational age is dubious. This study investigated the effect of Betamethasone on respiratory distress syndrome among neonates with gestational age of 35-36 weeks.

Materials and Methods: This double blind randomized controlled trial study was done on 200 pregnant women who were of high risk for preterm labor in 35-36 weeks of gestation in Sanandaj city-Iran during 2007. 200 pregnant women randomly divided into treatment and placebo groups were received intramuscularly Betamethasone (12 mg/kg/BW twice) and normal saline, respectively. Data including age of mother, sex, weight, respiratory distress syndrome and newborns admission in hospital were recorded for each subject. Data was analyzed by using two-tailed T, Mann-Whitney, chi-square and Fisher exact tests.

Results: There were no difference among two groups about age of mother, sex and weight of newborns. There were 8 (8%) and 20 (20%) newborns with respiratory distress syndrome in case and controls, respectively ($P < 0.01$). Admission in hospital was 16% in Betamethasone group vs 28% in normal saline group ($P < 0.04$).

Conclusion: The study demonstrated that exposure to antenatal Betamethasone with 12mg/kg/BW twice between 35 and 36 weeks of gestation is associated with a significant reduction in the rate of respiratory distress syndrome.

Keywords: Corticosteroids, Respiratory distress syndrome, Preterm labor

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