Neonatal Outcome of Premature Rupture of Membranes in Mothers Receiving Cefotaxime and Ampicillin: A Randomized Clinical Trial

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ABSTRACT

Introduction: Premature rupture of membranes (PRoM) is one of the most common and important causes of premature births and peripartum mortality. Maternal antibiotic treatment affects the infantile prognosis. A comparison between the effects of Cefotaxime and Ampicillin on infantile complications of PRoM was done in this clinical trial.

Materials and Methods: 220 parturient with PRoM who needed antibiotic therapy were randomized in two groups of A: Ampicillin and B: Cefotaxime treatments. The maternal/fetal statuses up to accouchement and the infants’ status up to transfer to ICU, death, or discharge from hospital were followed. The Apgar score, cardiac, respiratory and nervous systems, infection, immaturity, asphyxia, and mortality rates were compared in both groups.

Results: The differences between the two groups were significant in: Apgar score min1 (P=0.013) and min5 (P=0.004), need for resuscitation (P=0.003), asphyxia (P=0.003), need for hospitalization (P=0.003), infection (P=0.034), and mortality rate (P=0.000).

Conclusion: Administration of Cefotaxime in parturient with PRoM improved the Apgar scores and decreased respiratory complications, infection, asphyxia, mortality rate, and need for ICU hospitalization in infants.