



Antibiotics for amniotic fluid 'sludge' in high risk for preterm birth population

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Objective

To determine the effect of antibiotic administration in the presence of amniotic fluid "sludge", in high risk for spontaneous preterm birth pregnancies.

Methods

A historical cohort was conducted to compare the effectiveness of antibiotic treatment in high risk for spontaneous preterm birth (SPTB) pregnancies, with amniotic fluid 'sludge' (AFS). After applying inclusion and exclusion criteria, transvaginal scan was performed in 346 pregnancies. AFS was found in 86/346 (24.9%) patients, of which 51/86 (59.3%) belonged to the high-risk group for SPTB (cervical length < 25mm, previous spontaneous preterm birth, late miscarriage and mullerian malformations). The first 13 patients didn't receive antibiotics, while the other 38 received first generation cephalosporin and clindamycin. Neonatal results were compared regarding gestational age at delivery and birthweight.

Results

Birthweight was significantly higher in the treated group (2824 ± 799 grams vs 2258 ± 910 grams, $p = 0.038$), while mean gestational age was not significantly different (37.7 ± 1.8 vs 37.0 ± 7.7 , $p = 0.170$). Antibiotic use reduced the number of SPTB < 34 weeks (13.2% (5/38) versus 38.5% (5/13), $p = 0.047$), with an odds ratio of 0.242 (CI 95 %, 0.058 to 0.998).

Conclusion

Antibiotic therapy in the presence of amniotic fluid 'sludge' can reduce the incidence of spontaneous preterm birth < 34 weeks in high risk population. Further double - blind randomized controlled trial of antibiotics administration in the presence of AFS is needed.