



RESEARCH ABSTRACT FORM

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RESEARCH TITLE: The Effect of Latency Antibiotic Treatment on Neonatal Sepsis at the Time of Delivery in Pregnancies Complicated by Preterm Prelabor Rupture of Membranes

AUTHORS:

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INTRODUCTION: To determine whether neonates born to mothers on latency antibiotics at the time of delivery have the same likelihood of showing clinical or laboratory indications of sepsis as those babies born to mothers who completed a course of latency antibiotics.

METHODS: Retrospective chart review of singleton pregnancies with PPROM between 23w0d to 33w6d from 1/1/2012 to 12/31/2017 (n=211 neonates) at a tertiary hospital in Buffalo, NY. Diagnosis of neonatal sepsis was made by clinical or laboratory indications (I/T ratio >0.2).

RESULTS: Patients who completed latency antibiotics were 3-4 times more likely to have a neonate who was diagnosed with sepsis. Mothers diagnosed with chorioamnionitis were 4.8 times more likely to have their neonate diagnosed with sepsis. Also, an increase in one week in the gestational age at the time of delivery was statistically significant to reduce the odds of neonatal sepsis by a factor of 0.88.

CONCLUSIONS: The odds of developing neonatal sepsis increases in PPROM mothers the further they are from the completion of their course of latency antibiotics. The data also showed that increasing gestational age appears to have a protective factor against the development of chorioamnionitis. Stable PPROM patients should receive the course of latency antibiotics and consideration should be given to possibly continuing or giving another course of antibiotics to help decrease the risk of neonatal sepsis. In addition, chorioamnionitis should be prevented and allowing the fetus to advance to a greater gestational age before delivery will help decrease the sequelae associated with neonatal infection.