Adherence to the updated guidelines for the prevention of perinatal Group B streptococcal disease

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Objective

In 2010, the Centers for Disease Control and Prevention updated the Guidelines for the Prevention of Perinatal Group B Streptococcal (GBS) Disease. Previous studies of adherence to GBS guidelines have focused on the treatment of carriers of GBS. Our objective was to determine whether there was any difference in adherence to the guidelines for screening and treatment of women who delivered at our institution between the beginning of 2011 and the end of 2011 as the revised guidelines were published in November 2010. Our secondary outcome was to determine whether any differences in adherence occurred between prenatal provider types (OB/Gyn, Certified Nurse Midwives, and Family Practice).

Study Design

A retrospective cohort study in which demographic and clinical information were extracted from patients that delivered in 2011 (IRB# 201208773). We extracted data for the first 150 deliveries (Group 1) and the last 150 deliveries of 2011 (Group 2). Data was extracted from the electronic health record (Epic) and entered into an electronic database (REDCap). Chisquare analysis was performed for statistical comparisons.

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Results

Including all providers, compliance for Group 1 was 95.5% and for Group 2 was 90.4% (P=0.021). No statistical difference was found between provider types in Group 1 (P=0.341). However, in Group 2, there was a significant difference in adherence between provider types (P=0.03). In Group 2, the OB/Gyn obstetric providers had the lowest adherence at 89%.

Conclusions

Following a strict interpretation of the 2010 CDC guidelines, our institution had a very high rate of compliance for

screening and treating pregnant women for GBS. This is critically important due to increasing antibiotic resistance in GBS. Adherence to the revised guidelines was higher at the beginning of 2011, immediately following the publication of the revised guidelines. These results suggest a need to periodically re-educate obstetric providers of the guidelines

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