

IDSOG Poster Presentations

1 Does the degree of maternal fever in the setting of chorioamnionitis impact the risk of neonatal morbidity?



A. Abdalla, M. Varvoutis, S. Dotters-Katz

Duke University Hospital, Durham, NC

OBJECTIVES: The objective of this study is to assess the impact of high maternal fever ($>39^{\circ}\text{C}$) on neonatal morbidity.

METHODS: Secondary analysis of MFMU Cesarean Registry among singleton gestations with chorioamnionitis. Women with a temperature $< 39^{\circ}\text{C}$ (low temp) compared to those with $> 39^{\circ}\text{C}$ (high temp). Primary outcome was a composite of adverse neonatal outcomes: death, sepsis, necrotizing enterocolitis, Grade 3 or 4 intraventricular hemorrhage, seizure within 24 hours of delivery, intubation within 24 hours of delivery, and requiring cardiopulmonary resuscitation. Demographic characteristics compared using Fisher's exact and Wilcoxon rank-sum test as appropriate. Multivariate logistic regression analysis with stepwise backward regression performed to control for confounders.

RESULTS: Of 1313 included women, 1200 (91.3%) were in the low temp group and 113 (8.7%) in the high temp group. Women in the high temp group were more likely to be African American and GBS positive. No difference in adverse neonatal outcomes was noted between the groups (38.9% high temp vs 35.8% low temp, $p=0.54$). High temp was associated with increased risk of NICU admission (48.1% vs 50.4%, $p=0.02$). Further neonatal outcomes are in the Table. When controlling for African American race, preterm birth, and delivery route, patients with high temp were not more likely to have adverse neonatal outcomes (aOR 1.28, 95% CI 0.84, 1.98). In a stratified analysis of only term infants, when controlling for confounders, high temp, similarly, was not associated with increased odds of adverse neonatal outcomes (aOR 1.59, 95% CI 0.96, 2.65).

CONCLUSION: The degree of maternal fever does not appear to be associated with increased likelihood of adverse neonatal outcomes. Better understanding of maternal factors that affect neonatal morbidity in the setting of chorioamnionitis is critical.

LEARNING OBJECTIVES: Learners will be able to identify the association between degree of maternal fever and neonatal morbidity.

2 Knowledge, attitudes and barriers to pre-exposure prophylaxis use among women in the United States: a national survey



Lisa B. Haddad², Khady Diouf¹

¹Department of Obstetrics and Gynecology, Brigham and Women's Hospital, Boston, MA, ²Department of Obstetrics and Gynecology, Emory, Atlanta, GA

OBJECTIVES: This was a national survey of 1293 sexually active, HIV negative women in the United States aimed to assess knowledge, attitudes, and barriers to taking pre-exposure prophylaxis (PrEP). The purpose of this study was to understand the demographic characteristics of PrEP eligible women, their healthcare utilization, and barriers and facilitators of PrEP use.

METHODS: Using Amazon's mTurk, an online survey was distributed to sexually active, HIV negative women. Descriptive statistics and chi-squared test were used to characterize respondents at high risk vs low risk of HIV acquisition. Binomial regression was used to describe knowledge, attitudes and barriers to PrEP use. Women at

high risk for HIV infection were defined using CDC criteria for PrEP eligibility.

RESULTS: The cohort was primarily Caucasian women aged 25-44 (70%). Using CDC criteria, there were 194 high risk and 1099 low risk respondents. There was no difference in geographic distribution, age, education level or insurance status between the high and low risk women. High risk and low risk women were equally likely to know about PrEP (60 (30.9%) vs. 354 (32.2%), $p = 0.7239$). Among women who knew about PrEP, 45.9% learned it from social media/internet, 54.9% from traditional media, 6.3% from a physician, 1.2% from a partner, and 5.8% by word of mouth. In the high-risk group, 42% had seen an OB/GYN provider in the past year. The most commonly identified reason among high risk women for not taking PrEP was lack of perceived risk (58.4%), and most of them did not worry about their risk of HIV acquisition (70.6%). High risk women identified affordability, combination of PrEP and contraception, lack of lab monitoring as potential facilitators of PrEP use and acceptability.

CONCLUSION: This study demonstrates that PrEP knowledge among women in the United States is still limited with about 30% of women in the survey, including high risk women, aware of this HIV prevention method. Frequent interaction with OB/GYN providers among our cohort highlights a missed opportunity for PrEP counseling and utilization, which is underscored by the fact that few respondents (6%) received counseling regarding PrEP from physicians and were more likely to learn about the medication from social media or traditional media ($>90\%$). Key factors for PrEP implementation will be increasing accessibility by decreasing out of pocket costs, make it easily prescribed like contraceptives, and eliminate the need for lab monitoring.

LEARNING OBJECTIVES: Identify characteristics of women within the United States at high risk for HIV, recognize limited knowledge of PrEP and areas for improvement to increase PrEP knowledge and uptake among high risk women.

3 Ampicillin and metabolites in vaginal transudates after intravenous administration of ampicillin



M. Alkis, A. Cox, J. Nitsche, P. Heine, B. Brost

Wake Forest School of Medicine

OBJECTIVES: Ampicillin is one of the most widely used antibiotics in obstetrics, with well-established pharmacokinetics and previous studies elucidating ampicillin levels in maternal serum, amniotic fluid and fetal serum after doses maternal administration. However, no studies exist determining whether metabolites of ampicillin are present in vaginal transudates.

METHODS: Pregnant women from 24-42 weeks gestation receiving ampicillin for GBS prophylaxis were eligible for participation. Samples of vaginal secretions were collected from the anterior and posterior vaginal fornices using plastic cytology spatulas at 30, 60 and 90 minutes after a single dose of 2 g ampicillin IV. Levels of ampicillin and two metabolites, ampicilloic acid and diketopiperazine were measured using liquid chromatography/mass spectrometry. Laboratory methods were verified with standard curves for each compound. Clinical information was recorded in addition to information about the appearance of the samples.