

colonization was not associated with endometritis or wound infection among women who delivered by cesarean.

CONCLUSION: In contrast to earlier data prior to routine intrapartum antibiotic prophylaxis, colonization with GBS was associated with slightly lower odds of chorioamnionitis, but was not associated with postpartum wound infection or endometritis.

LEARNING OBJECTIVES: To understand the implications of intrapartum antibiotic prophylaxis for GBS on maternal infectious morbidity in pregnancy and the postpartum period.

29 Management of fever in labor after institution of a standardized order set at a maternity quaternary care center



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OBJECTIVES: Maternal fever in labour (FIL) is common, and can be the first sign of chorioamnionitis and sepsis. Our institution initiated a standardized order set for the management of FIL. This study evaluated maternal and fetal parameters in women with FIL in order to determine trends in antibiotic use, the applicability of obstetrical scoring system for sepsis and outcomes for women.

METHODS: An interim analysis of the retrospective chart review on 510 patients between 2011-2016 for which the FIL protocol was initiated was performed. 403 charts were reviewed due to clinical concerns of increasing gram negative bacteremia with antimicrobial resistance and poor compliance with blood cultures being drawn. Antenatal history, intrapartum parameters and maternal/fetal outcomes were evaluated. Categorical variables were compared using Fisher's exact tests and continuous variables with Wilcoxon rank sum tests.

RESULTS: The median maternal age was 31.5 years (SD4.6 years), median gestational age 39.9 weeks (IQR39-40.6), and a majority of women were nulliparous (81.9%). The median maternal temperature at the time of first fever was 38.1°C (IQR38.0-38.3), and 90.8% report epidural use. Antibiotics were administered 74% of the time when the order set was initiated, with 95% of antibiotic administration being a combination of metronidazole and cefazolin. At time of first fever, 31.8% reported concurrent fetal tachycardia, and a larger proportion of those women were subsequently given antibiotics (88vs72%, p=0.0007). Conversely, a larger proportion of those without fetal tachycardia were given acetaminophen vs those without (82vs72% p=0.032). Only 16.7% of women has blood cultures drawn, however women with blood cultures had a slightly higher first temperature; 38.2°C (IQR 38.0-38.4) vs 38.1°C (IQR 38.0-38.2) in those without blood cultures (p=0.0004). Histologically diagnosed chorioamnionitis was associated with higher initial temperature, 38.2°C vs 38.1°C without chorioamnionitis (p=0.002). There was one maternal transfer to ICU and 3 fetal deaths.

CONCLUSION: Our preliminary results identified only 16.7% of women having blood cultures drawn with initiation of antibiotic therapy for FIL with higher initial maternal temperature correlating with an increased likelihood of them being drawn. We found that fetal tachycardia was associated with antibiotic use and less acetaminophen use. This interim analysis demonstrated that between 2011-2016 few women were routinely having blood cultures drawn with initiation of antibiotic therapy.

LEARNING OBJECTIVES: Evaluate standardized change in practice and management of maternal FIL at an institutional level and identify areas of improvement.

30 Simple and effective screening for Chagas disease at the prenatal intake visit



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OBJECTIVES: An estimated 300,000 individuals have Chagas disease in the United States and Chagas is passed vertically at rates higher than syphilis, there is still not routine perinatal Chagas screening. We sought to evaluate the success of a simple screening program to identify maternal Chagas disease during prenatal care.

METHODS: This was a screening program of a cohort of women who had prenatal care at a community health center that serves a large Latinx population, all of whom delivered at a central hospital. Prenatal screening was done by asking all women at the prenatal intake where they were born, and if not born in a high risk area, whether they had ever spent 6 or more months continuously in Mexico, Central or South America. A positive answer to either or both questions prompted IgG screening. The practice of implementing routine screening for Chagas began mid-2017. We identified the women who delivered from February 2018 to March 2019, assuming initiation of prenatal care at twelve weeks and expecting a six month ramp up in universal screening. We evaluated the rate of identification of preliminary and confirmed positives in this cohort. Further, we evaluated connections with infectious disease and cardiology for the mother as well as CDC standard of care for evaluation of the newborn, when available.

RESULTS: A total of 619 women that delivered were screened for Chagas disease; IgG testing yielded 21 preliminary positive but confirmed negative results, 3 preliminary indeterminate results with subsequent negative confirmatory testing, and 3 confirmed positive results from the CDC. The prevalence of confirmed Chagas in the entire population was 0.5%. All three confirmed positive women have had normal cardiac evaluation. Of the three confirmed cases, one has delivered and both mother and infant have had follow up care in Infectious Disease.

CONCLUSION: A two question screen for Chagas disease risk at the initial prenatal visit is effective, and in select populations is high yield. Capitalizing on a time of insurance coverage and healthcare engagement, identification of Chagas in pregnancy can not only identify infants at risk of vertical transmission but may mitigate the complications of long term infection.

LEARNING OBJECTIVES: Learners will be able to describe a simple workflow that increases identification of Chagas in mothers as well as infants at risk of vertical transmission. Learners will be able to motivate their prenatal intake providers to add a single question to the new visit by empowering them with a realistic expectation of capturing women at risk and improving the health of both mother and child.

31 Successful linkage to Chagas care via screening at prenatal intake



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OBJECTIVES: While congenital Chagas occurs at rates higher than congenital syphilis, and prenatal care is a known time to capture chronic conditions while a woman is insured and engaged in care, there is still not routine perinatal screening. We sought to evaluate

the success of a 2 question screen in identifying maternal Chagas disease during prenatal care.

METHODS: This was a retrospective review of a cohort of women who had prenatal care at a community health center that serves a large Latinx population. The practice of implementing routine screening for Chagas exposure, first with a review of residential history and geography, followed by a screening IgG and reflex confirmatory testing at the CDC, began mid 2017. We captured the women delivered from February 2018 to current, assuming initiation of prenatal care at 12 weeks and expecting a 6 month ramp up in universal screening. We evaluated the rate of identification of preliminary and confirmed positives in this cohort. We calculated our false positive rate of the conventional screening tool. Further, we evaluated connection with infectious disease and cardiology for the mother as well as CDC standard of care for evaluation of the newborn, when available.

RESULTS: A total of 619 women delivered who were screened for residential history. Of these, XX had positive preliminary results and 3 were confirmed positive from the CDC. This resulted in a yield of 0.5% based on a 2 question screen. The FPR for the screening test was XX.

CONCLUSION: Screening for Chagas at the initial prenatal visit is feasible and high yield. Women can be connected to care and potentially mitigate the cardiac complications of long term infection, and infants can be treated and avoid cardiac sequelae in early adulthood.

LEARNING OBJECTIVES: Learners will be able to describe a simple work flow that increases identification of Chagas in mothers as well as infants at risk of vertical transmission.

32 Lactobacillus crispatus inhibits proinflammatory cytokine production in a human cervical explant model

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OBJECTIVES: We developed a human cervical explant model to investigate host-microbe interactions in the female genital tract.

METHODS: Punch biopsies of ectocervical tissue from patients undergoing hysterectomy for benign indications were cultured in transwells, surrounded by agarose and collagen to create a polarized system. Commensal vaginal microbe *Lactobacillus crispatus*, and/or toll like receptor (TLR) ligand LPS (TLR4) and MALP2 (TLR2/6) or the bacterial vaginosis (BV)-associated vaginal microbe, *Leptotrichia amnionii* were added to the apical surface for 24 hours. Cytokine, including IL6 and IL8, concentrations were measured in the culture supernatant. Tissue integrity and morphology were examined by histology. Tissue viability was measured by MTT assay.

RESULTS: In explants from 5 and 16 donors, MALP2 and LPS, respectively, induced increased IL6 and IL8 secretion relative to control. Pre-exposure to *L. crispatus* for 2 hours suppressed IL6 and IL8 production induced by heat killed *L. amnionii* or MALP2. Explant tissue remained > 80% viable with an intact epithelial layer, regardless of inflammatory stimulus or commensal exposure. Baseline variation in IL6 production between donors was large (CV = 152%) but in this small sample size was not associated with surgical indication (ANOVA, $p = 0.72$) or age (linear regression, $p = 0.26$).



CONCLUSION: We show that *L. crispatus* is sufficient to suppress cytokines induced by proinflammatory stimuli in a human cervical explant model. This model provides an opportunity to investigate the mechanisms of *Lactobacillus*-mediated cytokine suppression in complex human cervical tissues.

LEARNING OBJECTIVES: Learners will be able to identify some of the challenges and benefits of modeling host-pathogen interactions in human tissue explants

33 A missing key in ending the AIDS epidemic: training Ob/Gyn resident physicians in the management of HIV PrEP



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OBJECTIVES: New York State has championed the use of HIV Pre-Exposure Prophylaxis (PrEP) as a strategic tool in the campaign to end the AIDS epidemic by 2020. 19% of new HIV infections in the state are amongst heterosexual women, yet only 4% of women at risk are on PrEP. Increased provider knowledge about PrEP has been associated with higher rates of PrEP prescription and future intent of use. In order to improve patient access to PrEP, we conducted a training session targeting Ob/Gyn resident physicians who provide care to women in an East Harlem clinic.

METHODS: The training was directed by an HIV primary care specialist and attended by 18 Ob/Gyn residents at an academic medical center in New York City in March 2019. The participants were surveyed regarding their awareness and knowledge of PrEP, and their comfort identifying candidates and managing the medication. Statistical analysis with SPSS was used to compare survey responses before and after the training course. Two-sample t-test was used to compare difference in proportions of binomial variables and difference in means of likert-scored variables. ANOVA test was used to test the difference of scores between postgraduate year (PGY) classes.

RESULTS: All 18 participants responded to the survey. The four PGY levels were similarly represented in the sample. Two participants (11%) had prescribed PrEP in the past, although both had done so less than 5 times. Awareness of PrEP as an HIV prevention strategy was high both before (89%) and after (100%) the training. After the training, there was an increase in the understanding of the epidemiology of new HIV infections (50% to 95%, $p = 0.002$), familiarity with the PrEP clinical trials (50% to 94%, $p = 0.00$), comfort in determining candidacy for PrEP (mean score 2.17 to 4.22, $p = 0.00$), and comfort prescribing PrEP and follow-up (mean score 1.56 to 3.88, $p = 0.00$). Knowledge and comfort scores did not differ between PGY levels before or after the training.

CONCLUSION: Amongst Ob/Gyn residents, implementation of a short and targeted training in HIV PrEP increased both the knowledge and the comfort in identifying and managing patients who may benefit from PrEP services. Training is needed at all PGY levels as scores did not differ by class. Increasing training amongst providers serving women at high risk for HIV infection is a necessary and effective tool in closing access gaps and ending the epidemic. Further protocols in clinic will be implemented to solidify this simple programming intervention.

LEARNING OBJECTIVES: 1) Learners will be able to recognize the need to train Ob/Gyns in the management of HIV PrEP 2) Learners will be able to identify potential interventions that may increase knowledge and comfort of PrEP that might ultimately lead to increased PrEP use