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