LEARNING OBJECTIVES: Compare HIV-adapted prenatal care administered via group model (Centering) versus individual care model Identify differences in the population of women choosing group (Centering) versus individual prenatal care Recognize improvement in the odds of having an undetectable viral load at delivery in the group (Centering) care cohort.

6 Intrapartum antibiotic therapy with cefazolin rather than clindamycin or metronidazole is associated with lower postpartum infectious morbidity among women with chorioamnionitis delivering by cesarean

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OBJECTIVES: To investigate whether intrapartum surgical prophylaxis with cefazolin versus clindamycin or metronidazole decreases the risk of postpartum infectious morbidity among women delivering by cesarean receiving a base regimen of ampicillin or penicillin with gentamycin for chorioamnionitis.

METHODS: A secondary analysis of women who delivered by cesarean with a presumptive diagnosis of chorioamnionitis (intrapartum fever >100.4°F and receipt of intrapartum antibiotics) in the Maternal-Fetal Medicine Units Network (MFMU) Cesarean Registry. We compared surgical prophylaxis with cefazolin versus clindamycin or metronidazole. All women received a base regimen of penicillin or ampicillin with gentamycin. The primary outcome was a composite of postpartum maternal infectious morbidity: endometritis, wound infection, abscess, necrotizing fasciitis, maternal sepsis, and septic pelvic thrombophlebitis. Multivariable logistic regression was used, adjusting for age, parity, race, insurance, body mass index at delivery, pregestational diabetes, American Society of Anesthesiologists (ASA) classification, trial of labor prior to cesarean, and postpartum antibiotics.

RESULTS: Among 1,513 women with presumptive chorioamnionitis who delivered by cesarean, 28.3% (n=429) received cefazolin versus 71.7% (n=1,084) clindamycin or metronidazole. Most women (80.1%) received postpartum antibiotics, which was less likely with cefazolin versus clindamycin or metronidazole (63.1% vs. 86.9%; OR: 0.25; 95% CI: 0.19 to 0.33). The frequency of postpartum infectious morbidity was 9.8% (148/1,513), which was lower with cefazolin versus clindamycin or metronidazole (22.9% vs. 77.0%, OR: 0.73; 95% CI: 0.49 to 1.09). In multivariable analysis, women treated with cefazolin versus clindamycin or metronidazole had a nearly 70% lower odds of postpartum infectious morbidity (AOR: 0.31, 95% CI: 0.19 to 0.50), which held when the outcome was restricted to endometritis (AOR: 0.36; 95% CI: 0.22 to 0.61).

CONCLUSION: In this large multi-center cohort of women delivering by cesarean with chorioamnionitis receiving penicillin or ampicillin with gentamycin, postpartum infectious complications were decreased when surgical prophylaxis with cefazolin versus clindamycin or metronidazole was given.

LEARNING OBJECTIVES: Learners will consider implications of standard antibiotic prophylaxis for cesarean as opposed to alterative regimens in the setting of cesarean delivery with chorioamnionitis.

7 The vaginal microbiota, high-risk human papillomavirus infection, and cervical intraepithelial neoplasia: results from a population-based study

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OBJECTIVES: While there is epidemiologic evidence of an association between bacterial vaginosis and human papillomavirus (HPV) infection, the potential relationship between the vaginal microbiota, high-risk HPV, and cervical intraepithelial neoplasia (CIN) has been under studied. Our objective was to characterize the vaginal microbiota in a stratified random sample of women from a population-based study in Appalachia, which has the highest annual rate of cervical cancer mortality in the U.S.

METHODS: We analyzed cervico-vaginal samples from 358 women in the Community Access, Resources and Education (CARE): Project 3 study across 16 clinics in Ohio. Using Illumina MiSeq sequencing of 16S rRNA gene amplicons, we characterized the vaginal microbiota among women with a) CIN, b) high-risk HPV only, and c) a random sample of healthy controls. Linear discriminant analysis (LEfSe) was used to identify taxa that were significantly differentially abundant between CIN and high risk-HPV status compared to controls. We clustered vaginal microbiota into community types using PAM clustering based on theta-yc distances and used multinomial logistic regression models to test for associations between health status and vaginal microbiota community type and quartiles of relative abundance, respectively.

RESULTS: 94.4% of women were non-Hispanic White, and the mean age was 31.4 years (SD=12.7). Three main vaginal community types were identified: L. crispatus-dominant (17%), L. iners-dominant (37%), and a diverse community type (43%). Women with CIN or high-risk HPV were more likely to have a diverse vaginal microbiota community characterized by higher G. vaginalis relative abundance, compared to controls whose communities were more likely to be Lactobacillus spp. dominant ($p<0.03$). Both L. iners and L. gasseri were found at significantly greater relative abundances in controls than in women with CIN or high-risk HPV ($p= 0.027$ and 0.0014, respectively)).

CONCLUSION: Compared to healthy controls, the vaginal microbiota of women with CIN or high-risk HPV in Appalachia were characterized by a diverse community with increased relative abundance of G. vaginalis and reduced relative abundance of Lactobacillus spp. Further study and validation of these differences for prognostic use is warranted given they can be self-collected and are noninvasive.

LEARNING OBJECTIVES: Identify potential noninvasive vaginal microbiota risk markers of high-risk HPV and cervical intraepithelial neoplasia (CIN).

8 Patterns of treatment and tests of reinfection for trichomoniasis in pregnancy at a large safety-net hospital

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OBJECTIVES: To describe patterns of testing for trichomoniasis during pregnancy including modes of testing and presence of symptoms. To describe treatment and follow-up tests of reinfection (TOR) for trichomoniasis diagnosed in pregnancy.

METHODS: A retrospective cohort study was conducted of women who delivered at a single public hospital between July 1, 2016 and June 30, 2018. Eligible women had at least one triage or prenatal