

LEARNING OBJECTIVES: Learners will be able to identify the predominant *Lactobacillus* species detected by quantitative PCR in women with normal vaginal microbiota.

21 A case of chorioamnionitis, maternal sepsis, and fetal demise associated with streptococcus pseudoporcinus



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OBJECTIVES: *Streptococcus pseudoporcinus* has biochemical characteristics similar to *Streptococcus agalactiae* and has recently been found to colonize the female genital tract. It has been reported in association with clinical infections but has not previously been shown to be a cause of serious perinatal morbidity or mortality. Here we present a case of severe maternal morbidity (sepsis) and fetal demise associated with *Streptococcus pseudoporcinus*.

METHODS: Case report.

RESULTS: Case: A 41-year-old gravida 2, para 1001 presented with abdominal pain and fetal demise at 34 weeks gestational age. She was found to be in labor, with tachycardia and leakage of purulent fluid from the cervical os. Her maximum temperature was 37.5 degrees Celsius, and labs were significant for a white blood cell count of 29,000 per mL and a serum lactate of 2.4 mmol/L. Intravenous ampicillin and gentamicin were initiated in Labor and Delivery for a diagnosis of chorioamnionitis. She had a spontaneous vaginal delivery. A beta hemolytic streptococcus was isolated from the patient's urine, placenta, endometrium, and two blood culture sets. Testing for *Streptococcus* Lancefield groups A, B, C, F and G was negative. Biochemical studies included a positive pyrrolidonyl aminopeptidase (PYR) test and a negative catalase reaction. The isolates were resistant to optochin. API identification revealed *Streptococcus agalactiae* (biotype number 3063214) with 99.8% confidence at 24 hours. Identification of all isolates by matrix assisted laser desorption ionization time-of-flight (MALDI, Bruker) yielded *Streptococcus pseudoporcinus*, using the research use only database with log scores for each specimen ranging from 1.86 to 2.07. A blood culture isolate sent to a reference laboratory for bacterial 16S rRNA sequencing confirmed the identification of *Streptococcus pseudoporcinus*, with 100% identity of the first 467 base pairs of the 16S sequence to *Streptococcus pseudoporcinus* LQ 940-04. The patient recovered well in the postpartum period and left the hospital on postpartum day 4.

CONCLUSION: *S. pseudoporcinus* can be difficult to distinguish from *S. agalactiae*. Although the exact clinical significance of *S. pseudoporcinus* remains to be seen, our case demonstrates that it is a potential cause of serious puerperal infection. If there are other reports of puerperal infections with this organism, its significance and prevalence in genital tract flora may warrant further investigation.

LEARNING OBJECTIVES: Explain the evidence from a case that demonstrates that *S. pseudoporcinus* is a potential cause of chorioamnionitis and severe perinatal morbidity and mortality.

22 Pregnancy among young women with perinatally acquired HIV: a unique single site experience



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OBJECTIVES: Describe the perinatal outcomes among a unique cohort of women with perinatally acquired HIV infection (PHIV), followed from childhood or adolescence through pregnancy.

METHODS: All PHIV who received primary care as children or adolescents, became pregnant, received at least one prenatal care visit, and delivered a live born child from 2004-2017 were included. Date of death and cause of maternal death were recorded. Infants were screened for HIV based upon the Centers for Disease Control HIV screening guidelines (USPHS 2018).

RESULTS: We identified 53 adolescents and young women who were born with perinatally acquired HIV infection and subsequently received prenatal care and delivered their first child at our institution. A total of 72 pregnancies resulted in a live birth; 37 with one, 13 with two, and three women with three. There were no multiple births. The mean maternal age at time of first delivery was 20.8 years old (range 15-28), 77.3% were Black (African-American or Haitian) and most initiated prenatal care in the first or second trimester. Over half of these young women (50.9%) had an AIDS diagnosis prior to their first prenatal visit; there were no new AIDS diagnoses during pregnancy. All began pregnancy on HAART. Hypertensive disorders affected 16.7%, and there were no cases of diabetes before or during pregnancy. Almost 30% had one or more psychiatric diagnoses, 32% had an STI diagnosis at first pregnancy. During the prenatal period, 12 of the 53 young women were hospitalized. Six (50%) had two or more admissions prior to delivery. Hyperemesis was the most common admitting diagnosis. At the first prenatal visit 42.5% had a viral load <1000 and only 17 (23.6%) had a CD4 count > 500. Near delivery 54 (75%) had a viral load of <1000. All (100%) received antiretroviral therapy intrapartum. Cesarean (83.3%) was the most common mode of delivery, of which 15.3% were emergency. Mean gestational age was 36.9 weeks, with four <32 weeks. Five of the 53 mothers expired after the postpartum period (2.6-5.9 years later). Pediatric screening was completed for 61/72 children with a zero perinatal transmission rate. **CONCLUSION:** This unique single site large cohort study demonstrates that although complex, these pregnancies are not associated with a high risk of obstetric complications. Despite the Cesarean rate was high, the perinatal transmission rate was zero without an increased risk of obstetric related maternal deaths.

LEARNING OBJECTIVES: Learners will be able to demonstrate knowledge of perinatal outcomes among young women with perinatally acquired HIV infection.

23 Natural history of asymptomatic bacterial vaginosis among Kenyan women at high risk for HIV infection



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OBJECTIVES: To describe the natural history of incident asymptomatic bacterial vaginosis (BV) by Nugent score and identify factors associated with either BV resolution (Nugent score ≤ 4) or development of symptomatic BV.

METHODS: We identified women who experienced an incident asymptomatic BV infection (no self-reported discharge or itching) enrolled in the Mombasa Cohort, an open prospective cohort of women engaged in transactional sex in Mombasa, Kenya. Using competing risk models, we calculated the cause-specific hazard of resolving asymptomatic BV or developing symptomatic BV over up to 12 months, compared to no change in BV; the final model included baseline age, HIV status, Nugent score, Amsel criteria, contraceptive use, and frequency of vaginal sex. Women were censored if they received BV treatment or became pregnant; women with yeast diagnoses at baseline were excluded from this analysis.