

Additionally, the data suggests that the organisms found in these cultures are often consistent with those found in maternal and infant blood cultures. The overall incidence of positive infant and maternal blood cultures is low as compared to positive placental cultures.

Disclosures. Amanda Harrington, PhD, Beckman Coulter (Scientific Research Study Investigator)

1142. Increased Odds of Psychiatric Illness Among Mothers of Infants with Congenital Syphilis

Corinne R. Thornton, n/a¹; Susan C. Bleasdale, MD²; ¹University of Illinois College of Medicine Chicago, Chicago, Illinois; ²University of Illinois at Chicago, Chicago, IL

Session: P-51. Maternal-child Infections

Background. Syphilis can be transmitted mother to child during pregnancy leading to multisystem birth defects if untreated. In Illinois, screening is mandated for pregnant women at first and third trimesters. The University of Illinois Hospital (UIH) serves a vulnerable patient population with a high syphilis prevalence. An understanding of risk factors associated with maternal syphilis infection can guide prevention of congenital syphilis (CS) with early prenatal diagnosis and treatment. The aim of this retrospective case control study is to describe maternal risk factors associated with CS in a clinical setting.

Methods. Using a database used for health department reporting from 2014-2018 at UIH, 106 maternal syphilis diagnoses were identified. Medical records were reviewed for CS infant diagnosis, sociodemographic information, medical history, and potential risk factors, including multiple sex partners, HIV status, drug use, history of incarceration or sex work, and having sex with men who have sex with men (MSM). Cases were matched with controls of pregnant women with syphilis testing that was not indicative of infection.

Results. Of the maternal syphilis diagnoses identified, there were 8 cases in which CS was possible or highly probable, 68 in which CS was less likely or unlikely, and 30 that were lost to follow up. Of the possible and probable infants' mothers, 38% had a psychiatric illness (6.80 OR, 95% CI 1.06-43.48) and 25% were homeless (12.00 OR, 95% CI 0.94-153.89). Late or scant prenatal care was seen in 75% (4.15 OR, 95% CI 0.72-23.95) and 75% had inadequate syphilis treatment. None were HIV positive or reported incarceration, intravenous drug use, sex work, or having sex with MSM.

Conclusion. Among infants with probable or possible CS, there was a 6.80 increased odds of maternal psychiatric illness compared to those born to mothers not diagnosed with syphilis, which may have complicated prenatal care and delayed diagnosis or treatment. Psychiatric illness outnumbered several other known risk factors; however, these may be less often discussed during clinical encounters. Psychiatric illness history may be a risk factor and means to identify women in the clinical setting who need close follow up and outreach after a prenatal syphilis diagnosis to prevent or mitigate congenital transmission.

Disclosures. All Authors: No reported disclosures

1143. Late-Onset Hearing Loss and Antiviral Therapy for Congenital Cytomegalovirus Infection

Alexandra K. Medoro, MD¹; Cory T. Hanlon, BS²; Traci Pifer, RN²; Maria Reyes Escamilla, MD²; Masako Shimamura, MD²; Ursula M. Findlen, PhD²; Holly Gerth, AuD²; Oliver Adunka, MD³; Prashant Malhotra, MD³; Pablo J. Sanchez, MD¹; ¹Nationwide Children's Hospital - The Ohio State University, Columbus, OH; ²Nationwide Children's Hospital, Grove City, OH; ³Ohio State University, Columbus, OH

Session: P-51. Maternal-child Infections

Background. Congenital cytomegalovirus (CMV) is the leading non-genetic cause of sensorineural hearing loss (SNHL) in children. While SNHL is often present at birth, as many as 25% of congenital CMV-infected infants may develop late-onset hearing loss. Antiviral therapy improves hearing outcomes, but its effect on the occurrence of late-onset SNHL is not fully known. Thus, our objective was to describe the prevalence of late-onset SNHL among congenital CMV-infected children treated with antiviral therapy in the first month of age.

Methods. From 2013 to present, infants with congenital CMV infection referred to Nationwide Children's Hospital's (NCH) NEO-ID Clinic, Columbus, OH underwent complete evaluation including hearing testing. Pertinent demographic, clinical, laboratory, and radiographic data were obtained and managed using REDCap electronic data capture tools. Infants who passed the newborn hearing screen and subsequently developed late-onset SNHL were identified and compared with respect to receipt of antiviral therapy in the neonatal period. Statistical analyses were performed using GraphPad Prism for macOS version 8.3.0.

Results. During the 6-year study period, 99 infants had congenital CMV infection and 69 (70%) of them passed the newborn hearing screen. 46 (46%) neonates received antiviral therapy (1, ganciclovir; 38, valganciclovir; 7, both) for clinically apparent congenital CMV infection. One (2%) child developed late-onset SNHL. This infant was born at 37 weeks' gestation (birth weight, 2525 g) with microcephaly (head circumference, 31 cm) and cerebral calcifications and was diagnosed with congenital CMV infection at 8 days of age. Treatment with valganciclovir was initiated at 9 days of age, and he developed mild unilateral SNHL at 1 month of age while on treatment and subsequently right severe-profound SNHL and left mild-moderate SNHL.

In comparison, among 23 infants with clinically inapparent disease who passed the newborn hearing screen and did not receive antiviral therapy, 5 (22%) subsequently developed SNHL (p=0.014).

Conclusion. Infants who received antiviral therapy for clinically apparent congenital CMV infection had significantly less late-onset SNHL than untreated infants, thus supporting a hearing protective effect of antiviral treatment.

Disclosures. All Authors: No reported disclosures

1144. Prevention of Mother-to-Child Transmission of Hepatitis B at UNC Hospitals

Wesley M. Sayre, n/a¹; ¹UNC School of Medicine, Raleigh, North Carolina

Session: P-51. Maternal-child Infections

Background. Hepatitis B virus (HBV) contributes to liver-related morbidity and mortality on a global scale. In mothers with active hepatitis B, up to 100% of mother-to-child-transmission (MTCT) is preventable. Guidelines from the American Association for the Study of Liver Diseases (AASLD) recommend that HBV vaccination and hepatitis B immunoglobulin (HBIG) be given to HBV-exposed infants in a timely manner to prevent up to 90% of MTCT. Additionally, AASLD guidelines recommend that women with high-risk HBV (those with viral load >200,000 IU/mL and/or HBV e antigen [HBeAg] positivity) receive tenofovir prophylaxis to further prevent MTCT. In this chart review, we compared UNC Hospital's prevention of MTCT measures to standing AASLD guidelines.

Methods. This retrospective chart review included data from all HBV-positive mothers giving birth at UNC Hospitals from April 1, 2014 through December 31, 2019. We investigated the HBV status of mothers, time to neonatal HBV vaccination, time to HBIG administration, maternal HBV viral load, maternal HBeAg status, and whether tenofovir was provided for high-risk mothers. Data was then compared to AASLD guidelines distributed in January 2017.

Results. We identified 99 HBV-positive pregnant women over a five-year period. The rate of timely administration of HBIG was 99%. The rate of timely hepatitis B vaccination was 97%. The single neonate who did not receive the HBV vaccination within 12 hours was born to a mother whose HBV testing was initially positive but confirmatory testing was negative. Most (65%) women had documented HBV viral load and 75% of women had HBeAg studies. Nine women were identified as high-risk, with only one not receiving tenofovir.

Conclusion. UNC Hospitals were compliant with AASLD guidelines regarding timely neonatal vaccination, providing nearly 99% of neonates with timely HBIG and all but three neonates with timely HBV vaccine. The majority of high-risk women identified received tenofovir prophylaxis. However, there is room for improvement in laboratory evaluation to identify other high-risk women. While initial data is reassuring, quality improvement measures include improving testing rate to determine risk status for HBV-positive mothers and further investigation of appropriate follow-up testing for both mothers and children.

Disclosures. All Authors: No reported disclosures

1145. The Role of Maternal Vaccination on Healthcare Visits for Acute Respiratory Infections in HIV-Exposed but Uninfected (HEU) Infants

Carol M. Kao, MD¹; Amanda S. Thomas, MSPH²; Andres Camacho-Gonzalez, MD, MSc²; Anandi N. Sheth, MD, MS¹; ¹Emory University, Atlanta, Georgia; ²Emory University School of Medicine, Atlanta, Georgia; ³Ponce Family and Youth Clinic, Grady Infectious Diseases Program, Grady Health Systems, Atlanta, GA

Session: P-51. Maternal-child Infections

Background. HEU infants remain at higher risk for hospitalization and severe infection from common childhood illnesses. Maternal immunization during pregnancy with influenza and tetanus, diphtheria, pertussis (Tdap) vaccine is recommended and effective at protecting infants from vaccine-preventable infections.

Methods. We conducted a retrospective cohort study of pregnant women living with HIV (WLWH) who delivered and received prenatal care at Grady Memorial Hospital (GMH) between November 1, 2012 and June 30, 2018. Vaccination history was ascertained through the Georgia Registry of Immunization Transactions and Services or by review of electronic medical record. Mother and infant charts were reviewed. We defined acute respiratory infection (ARI) as infants who presented with symptoms or an admitting diagnosis suggestive of an ARI. Relative risks (RR) of identified care visits (clinic, ED/urgent care, hospitalization) in the 6 months post-partum between WLWH with varying vaccinations were compared with 95% confidence intervals.

Results. 236 WLWH who delivered at GMH were identified (Table 1). Of those, 66 (28%) received only influenza, 32 (14%) received only Tdap vaccine, 64 (27%) received both and 74 (31%) did not receive any vaccines during pregnancy. There was a trend towards decreased risk of a clinic visit, emergency department/urgent care visit, or any healthcare-associated visit in the first 6 months of life for an ARI in infants born to mothers who received any vaccine during pregnancy versus none although not reaching statistical significance (Table 2). There was a trend towards decreased risk of hospitalization for an ARI in the first six months of life in infants born to mothers who received both influenza and Tdap vaccines during pregnancy versus unvaccinated (RR 0.55, 95%CI: 0.14-2.22). Infants born to mothers vaccinated tended to have higher gestational age than those that did not (Table 3).