Session: 272. Studies of Treatment and Prevention of Viral Disease Saturday, October 5, 2019: 12:15 PM

Background: Cytomegalovirus (CMV) is a rare cause of meningoencephalitis (ME) with limited data to date to cases reported.

Methods: Retrospective observational study of all viral central nervous system (CNS) infections identified in 17 hospitals in the Greater Houston area from 2000 to 2017. CMV, herpes simplex virus (HSV), varicella zoster virus (VZV), and enterovirus were all identified by a positive cerebrospinal fluid (CSF) polymerase chain reaction (PCR) and all arboviruses were identified by serology.

Results: A total of 361 patients with viral CNS infections were identified: CMV (n = 33), enterovirus (n = 147), herpes simplex virus (n = 83), varicella zoster virus (n = 28), and arboviruses (n = 70). CMV ME occurred more frequently in immunosuppressed patients (e.g., Acquired Immune Deficiency Syndrome (AIDS)), had more hypoglycorrhachia (59%), and had worse clinical outcomes (61%) as compared with those with HSV, enterovirus, VZV and arboviruses. Furthermore, CMV ME had more severe illness and death from entering HSV and had lower CSF pleocytosis compared with HSV. Additionally, CMV ME had higher CSF protein levels than enteroviral infections and had less CSF lymphocytosis than HSV and VZV.

Conclusion: CMV meningoencephalitis is seen more frequently in immunosuppressed patients (e.g., AIDS). However, little is known about CMV ME and it has worse clinical outcomes compared with other viral CNS pathogens.

Disclosures. All authors: No reported disclosures.

2653. Epidemiology and Risk Factors for Healthcare-Associated Viral Infections in Children

Samantha E. Hanley, BS1; Folasade Odeyemi, MPH2; Kristin Fremer, MD, MPH3; Susan E. Cotin, MD, MPH4; Julia S. Sammons, MD, MSCE5; 6Children's Hospital of Philadelphia, Philadelphia, Pennsylvania; 7Philadelphia Department of Public Health, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Session: 272. Studies of Treatment and Prevention of Viral Disease Saturday, October 5, 2019: 12:15 PM

Background: Healthcare-associated viral infections (HA-VI) are common in hospitalized children and are increasingly recognized as a cause of preventable harm. Yet, epidemiology and modifiable risk factors related to pediatric HA-VI are currently poorly understood.

Methods: We performed a prospective case–control study to identify the risk factors for HA-VI infections associated with pediatric HA-VI at a quaternary care children’s hospital between November 2016 and August 2018. Prospective surveillance for HA-VI was performed hospital-wide by certified infection preventionists using NHSN definitions. Cases were matched 1:1 to controls by age, duration of hospitalization, and hospital unit. We abstracted data from the electronic medical record and conducted semi-structured interviews with patient caregivers to identify potential exposures beginning 4 days prior to HA-VI identification date. We also measured length of antibiotic therapy (LOT) in the 7 days following enrollment.

Results: During the study period, we identified 143 eligible patients with HA-VI and enrolled 64 matched case–control pairs. In total, 79 viruses were identified among 64 case patients, of which 53 (67.1%) were respiratory viruses and 26 (32.9%) were GI. Case patients were more frequently exposed to a sick visitor, specifically either caregiver or sibling, compared with controls (18.8% vs. 9.4%; P = 0.26; Fisher exact test). During exposure period patients also had a significantly higher number of hospital procedures performed when compared with controls (n = 320 vs 232; X2 = 58.43, P < 0.001). Case, when compared with control, patients had a greater average LOT (2.89 vs 1.08).

Conclusion: Results of study show that exposure to a sick visitor is a potentially modifiable risk factor for pediatric HA-VI. In addition, hospitalized children with HA-VI have increased exposure to antibiotic antibacterias when compared with matched controls. Prevention of pediatric HA-VI may have implications for antibiotic stewardship. Our findings suggest that hospital policies may need to be revised, with emphasis on visitor screening and partnership with families, to reduce the incidence of pediatric HA-VI during hospitalization.

Disclosures. All authors: No reported disclosures.

2654. Myocarditis in Dengue: A Prospective Observational Study

Manish Soneja, MD Medicine; Manasvini Bhatt, MBBS; Faraz A Faroqui, MD Medicine; Naval K Vikram, MD Medicine; Ashutosh Baware, MD Medicine; Parth B Desai, MD Medicine; Pooja Shah, MD Medicine; Nilesh Parikh, MD Medicine; Aparna Kulkarni, MD Medicine; Aniruddha Bajaj, MD Medicine; Deepak Dewan, MD Cardiology; Pranav Udpal, MD Cardiology; Anand Babbar, MD Cardiology; Naveet Vag, MD Medicine; All India Institute of Medical Sciences, New Delhi, India

Session: 272. Studies of Treatment and Prevention of Viral Disease Saturday, October 5, 2019: 12:15 PM

Background: Cardiac involvement in dengue fever is underdiagnosed due to low index of suspicion and overlapping clinical manifestations of capillary leak associated with dengue. The frequency of subclinical dengue myocarditis and its relative contribution to the hemodynamic instability in severe dengue needs to be explored. We studied the prevalence of myocarditis and clinical outcomes among admitted patients with dengue.

Methods: A prospective observational study was carried out in admitted patients with age between 18 and 65 years having confirmed dengue (NS1/igm ELISA). Patients with electrolyte abnormalities or on medications affecting heat rhythm, rate,