Congenital Neurological Disorders in Children with Microcephaly Related to Exanthematous Diseases During Pregnancy: A Cohort Study

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2342. Evaluation of Pregnant Women, Fetuses and Infants with Zika Virus Exposure and Infection: Lessons Learned from the Congenital Zika Program at Children’s National
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Background. Zika Virus (ZIKV) infection during pregnancy has severe potential consequence to the fetus. Despite limited endemic transmission in the continental US, travel/sexual exposure in the periconception/pregnancy period requires experienced multidisciplinary care to assess potential infection and effects in the fetus.
Methods. The Congenital Zika Program at Children’s National (CZPCN) was developed to meet need for pre- and post-natal consultation in the setting of Zika exposure/infection during pregnancy. CZPCN includes multidisciplinary expertise in fetal imaging, pediatric infectious diseases, fetal and pediatric neurology. Services include a hotline, facilitation of Zika testing and interpretation, detailed fetal MRI. US, delivery instructions to facilitate postnatal evaluation of ZIKV exposed/fected fetuses and educational outreach to providers regarding ZIKV.
Results. Between Jan 2016 and May 2017, 36 women/fetuses were evaluated at CZPCN for possible ZIKV infection during pregnancy (32 US residents who traveled, 2 with partner who traveled, 2 emigrees). An additional 14 women/infant pairs were evaluated following postnatal referral to our program. Exposure route included arboviral (89%) and/or potential sexual exposure (48%). Symptoms occurred in only 6/50 (12%). Exposure occurred in the preconceptual period in 10/50 (20%), first trimester in 23/50 (46%), second trimester in 13/50 (26%), and third trimester 4/50 (8%). Nearly 50% (24/50) of women presented outside the 12 week window of exposure and could not have infection excluded. ZIKV was confirmed in 22% (11/50) or suspected due to unspecified flavivirus infection in 28% (14/50). Only 7/50 (14%) had negative PCR/IgM testing in appropriate window to exclude infection. Two fetuses with severe involvement were not carried to term, 1 was carried to term but died immediately after birth and 1 died within the first year of life.
Conclusion. CZPCN fills a critical need within our region to facilitate evaluation of exposed/infected pregnant women/fetuses/infants including neurodevelopmental followup of affected surviving infants. Lessons learned are instructive to other centers developing programs, needed as the range of endemic Zika transmission expands.
Disclosures. All authors: No reported disclosures.

2343. Congenital Neurological Disorders in Children with Microcephaly Related to Exanthematous Diseases During Pregnancy: A Cohort Study
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Background. An increase in the prevalence of microcephaly (MCP) was seen in Rio Grande do Norte State (RN) since September 2015. This Brazilian northeast state was highly impacted by a Zika (ZIKV) outbreak in the last 2 years. The highest rate of MCP was in November 2015 with 20.1 cases per 1,000 live births, compared with 1.8 cases/year in the previous years. Our study aimed to evaluate the neurological disorders in children with microcephaly whose mothers had exanthematous disease (ED) during the pregnancy.
Methods. We evaluated children up to 17 months old followed at a children rehabilitation center in RN. Cohort enrollment occurred with children born between January 2015 and May 2016. We interviewed their mothers about the occurrence of ED during their pregnancy.
Results. Of the 37 cases of MCP (25 male, 12 girls), 10 mothers did not know how to describe the presence of ED during pregnancy. Of the 24 cases of MCP with maternal ED, 9 patients were classified as having severe spasticity (Ashworth score 3 and 4), 4 patients were classified as mild (Ashworth score 1 and 2) and 11 had no spasticity. Eleven patients had seizure disorders and 5 reported irritability.
Conclusion. According to this data, there is a high prevalence of neurological complications in children with MCP related to ED. These patients need close follow-up care and intensive medical interventions. Longer follow-up will provide data regarding these chronic neurological complications and how best to intervene.
Disclosures. All authors: No reported disclosures.

2344. Clinical and Epidemiological Profile of the Chikungunya and Zika Outbreak in Neonates 2014–2016, Cartagena–Colombia
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Background. African researchers noted that aedes-transmitted Zika epzoitcs tended to follow aedes-transmitted Chikungunya virus (CHIKV) epidemics. In 2013 CHIKV spread pandemically from Africa-Africa, and Zika followed (1). Cartagena has been affected since 2014 by arboviruses with the most severe clinical forms in fetus, neonates and pregnant (1–4). Aim: To describe clinical, epidemiological profile of CHIKV and ZIKA neonatal (CHIK- neonatal, ZIKA-neonatal) in Cartagena-Colombia, between September 2014 and June 2016.
Methods. Case Series, we included neonates from 3 NICs were classified as suspected/confirmed cases of CHIK-neonatal and ZIKA-neonatal by RT-PCR.
Results. Between September-December 2014, 12 newborns with mean gestational age 38 ± 1.2SD were included as CHIK-neonatal cases, 66.8% (8/12) of these cases were symptomatic confirmed by CHIKV four-days before or two-days after the delivery. Neonates had symptoms average 7.7 ± 6.9SD, median 5[2,7]; Sign-Symptoms: 100% irritability-pain, 83.3% fever, 66.6% exfoliative dermatitis, 58.3% rash, vomiting, abdominal distension and joint edema 16.6% each, 8.3% neurologic syndrome. All RT-PCR were positive for CHIKV and leukenosia with lymphopenia. Between December 2015-January 2016, 23 newborns with malformations and/or epidemiological data from mother with Zika-infection confirmed by RT-PCR, were included. 85.7% were controlled pregnancy, Median-maternal age 23 years [17.0–30.0], 42.8% of mothers had Zika symptoms in first trimester, median 10 weeks [10.0–30.0], 42.9% had vaginal delivery. Median gestational age 37.2weeks [37.0–39.3], Median weight 2.840 ± 2,490–3,420), Size 48cm [45–51]; 57.1% female. 85.7% of newborn had microcephaly, 28.6% xero derivatives, 28.6% perinatal asphyxia each, 28.6% myelomeningocele, ventriculomegaly, microcephaly, calcolumiations and cerebrall hypoplasia, 14.3% ocular alterations. Normal hemograms, positive ZIKA-RT-PCR, negative Dengue, CHIKV and negative serology for TORCHS.
Conclusion. CHIK- neonatal and ZIKA-neonatal are an increasing possibility and must be considered in the approach of TORCHS complex (5). The maternal epidemiological background is fundamental in the diagnostic in endemic areas.
Disclosures. All authors: No reported disclosures.

2345. Infants Born in New York City to Women with Zika Virus Exposure During Pregnancy, January 2016 – May 2017
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