

P0529 Dengue and chikungunya infection in pregnant women: case series from a surveillance study in Barcelona, Spain

Elena Marbán-Castro¹, Anna Gonce², Carolina Esteve⁴, Victoria Fumadó¹, Miguel Martínez¹, Adela Saco⁵, Dolors Salvia², Marta Lopez², Laura Garcia², Laura Salazar², Maria-Jesus Pinazo¹, Natalia Rodriguez-Valero¹, Ines Oliveira¹, Ana Requena-Méndez¹, Marina Fuente-Moreno¹, Paola Castillo¹, Izaskun Alejo Cancho^{*3}, Veronica Gonzalo³, Aina Casellas¹, Raquel Gonzalez¹, Jose Muñoz¹, Joaquim Gascon¹, Jaume Ordi¹, Clara Menéndez¹, Azucena Bardaji¹

¹ISGlobal, Barcelona Centre for International Health Research (CRESIB), Hospital Clínic, Universitat de Barcelona, Barcelona, Spain, ²Department of Maternal-Fetal Medicine, BCNatal – Barcelona Center of Maternal-Fetal and Neonatal Medicine, Hospital Clínic and Hospital Sant Joan de Déu, Universitat de Barcelona, Barcelona, Spain, ³Department of Clinical Microbiology, Hospital Clínic, Barcelona, Spain, ⁴Department of Tropical Pathology and Imported Diseases, Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain, ⁵Department of Pathology, Hospital Clínic, Barcelona, Spain

Background

Dengue (DENV) and Chikungunya (CHIKV) are arboviruses transmitted by *Aedes* spp. mosquitoes and can cause disease in humans. The recent Zika virus (ZIKV) pandemic raised international awareness on arboviruses and its consequences on reproductive health. There is some evidence on the association between DENV and CHIKV infection and harmful consequences during pregnancy. We aimed to describe epidemiological and clinical characteristics of a case series of pregnant women with evidence of infection of DENV and/or CHIKV, as well as and their pregnancy outcomes.

Material/Methods

A surveillance system of ZIKV infection in pregnant women was established at Hospital Clínic of Barcelona and Hospital Sant Joan de Déu with returning travellers from ZIKV affected areas. Additionally, serological screening for other arboviruses such as DENV and CHIKV was offered. Information on travel history, epidemiological, clinical characteristics, laboratory diagnosis and pregnancy outcomes was collected in standardized questionnaires.

Results

From 1st January 2016 to 31st October 2017, 176 pregnant women were screened for arboviruses as part of the surveillance study of ZIKV. Evidence of infection for Dengue virus (positive IgM) was found in five women, being two of them symptomatic. Three women presented slightly specific IgM antibodies for Chikungunya. One of the women with a confirmed infection by DENV, was also diagnosed as a confirmed case of ZIKV infection (by RT-PCR) and her pregnancy ended in a miscarriage. Women were followed-up throughout pregnancy until delivery and gave birth to full-term healthy newborns; except one still ongoing pregnancy.

Conclusions

We reported pregnancies at risk of arboviruses such as DENV and CHIKV, from returning travellers to Spain. Screening for arboviruses needs to be contemplated among pregnant travellers returning from endemic areas and/or compatible clinical signs and symptoms. These pregnant women should be considered at risk and be appropriately followed up.