



SAMPLE ABSTRACT

PRESENTATION TITLE:

Ocular Findings Associated with Congenital Zika Virus Infection

PRESENTING AUTHOR:

Mauricio Maia (Universidade Federal de São Paulo, Brazil)

CO-AUTHORS:

Camila V. Ventura; Bruno P. Freitas; Joao R. Dias; Liana O. Ventura; Rubens Belfort Jr.

OBJECTIVE/PURPOSE (INTRODUCTION):

The Zika virus (ZIKV) is an arbovirus transmitted by mosquitoes *Aedes aegypti* that in 2015 has been associated to severe congenital malformations.

A twentyfold higher incidence of microcephaly in several northeastern Brazilian States has been associated with ZIKV, the virus being found in the amniotic fluid of pregnant women whose fetuses presented a reduction in the circumference of the head. From May to December 2015, 18 of the 26 states in Brazil confirmed ZIKV cases, suggesting potential spreading to other countries and continents where *Aedes aegypti* exists. In November 2015, the Brazilian Ministry of Health and PAHO/WHO sent out an alert for the cause-effect relation between ZIKV infection during pregnancy and the congenital microcephaly.

Medical information is scarce and the ocular signs have not yet been reported. We present ophthalmological findings in 100 children (less than 3 months of age) with congenital microcephaly.

METHODS:

The infants and their mothers were examined in December 2015 in the cities of Recife and Salvador (Brazil). Toxoplasmosis, Rubella, Cytomegalovirus, Syphilis and Human Immunodeficiency Virus infection were excluded.

RESULTS/CONCLUSION:

All of the mothers denied conjunctivitis or ocular complaints during pregnancy and 70% of them referred cutaneous rash, fever or arthralgia. None presented signs of uveitis, retinal lesion or vasculitis.

Roughly 50% of the infants presented abnormal ocular findings. They comprised chorioretinal lesions expressing areas of macular and paramacular chorioretinal atrophy, focal and diffuse pigment mottling as well as optic nerve colobomas. One infant presented unilateral iris partial coloboma and another infant presented with a microcornea associated with retinal lesions.

Zika is already a major public health problem and the association with microcephaly was recognized in late 2015. Chorioretinal and optic nerve lesions were first identified in December 2015 and seem to be frequent. The presence of these lesions may be part of the diagnostic criteria.