The Zika Virus Epidemic from an Ophthalmologic Perspective
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I. Introduction
The recent Zika virus (ZIKV) outbreak that was first reported in Brazil in 2015 caught international attention once it was linked to birth defects. In early 2016, due to its rapid spread throughout the Americas, the World Health Organization (WHO) declared ZIKV a Public Health Emergency of International Concern (PHEIC). Although no longer considered a PHEIC, its impact on public healthcare remains and funding for prevention, diagnosis and management is still required. In September 2016, the US congress approved $1.1 billion for Zika funding in diagnostics, vaccines, vector control and surveillance.

II. Zika Virus: Epidemiology

III. Congenital Zika Syndrome
   a. Definition
   b. Systemic Malformations/Findings
      i. Neurological/Neuroimaging
      ii. Ocular
      iii. Skeletal
      iv. Audiological

IV. Ocular Findings
A diversity of ocular findings associated to ZIKV infection in adults and newborns has been reported in literature. The ocular findings identified in newborns are related to the vertical transmission of the virus and those observed in adults happen during the acute phase of the acquired ZIKV infection.

   a. Acquired Zika Infection (adults)
      i. Anterior Uveitis
      ii. Posterior Uveitis
   b. Congenital Zika Infection (newborns)
      i. Anterior Segment Involvement
      ii. Posterior Segment Involvement
      iii. Structural Findings

V. Vision in Children with CZS

VI. Diagnosis and Differential Diagnosis
   a. Nucleic acid testing (NAT)
      i. RT-PCR
   b. Serology (IgM antibodies)
      i. Zika MAC-ELISA
   c. Plaque Reduction Neutralizing Test (PRNT)

VII. Physiopathology

VIII. Rehabilitation Treatment

References: