ACUTE MACULAR NEURORETINOPATHY ASSOCIATED TO DENGUE DISEASE

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PURPOSE

Describe an Acute Macular Neuroretinopathy (AMN) case associated with dengue disease.

METHODS

A Case report of a bilateral AMN in a patiente with confirmed dengue virus infection based on clinical and serological criteria.

RESULTS

A 30 year old female with a current episode of dengue confirmed by positive of NS1 test, complaining of painless progressive vision loss in her left eye (LE) for 5 days. No phtalomological history. Her best corrected visual acuity (BCVA) was 1,0 RE and 0,7 LE. Biomicroscopy, intraocular pressure, and fundus examination were unremarkable in both eyes. Near-infrared reflectante imaging of both eyes (NIR) revealed focal perifoveal hyporeflective lesions. Macular OCT showed focal interruption of the ellipsoid zone and RPE interdigitation zone in both eyes. Multifocal ERG recorded relative reduction of the amplitude of the foveal traces in the LE compared to the RE. The patiente complained of recovery of BCVA, as well as a cure of the dengue infectious process, without ocular therapies.

Fig. 1: retinography of the left eye

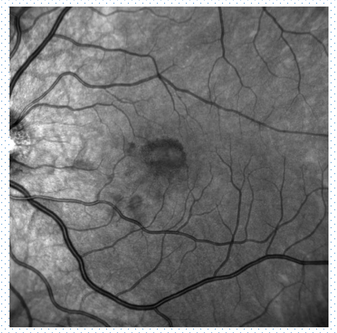
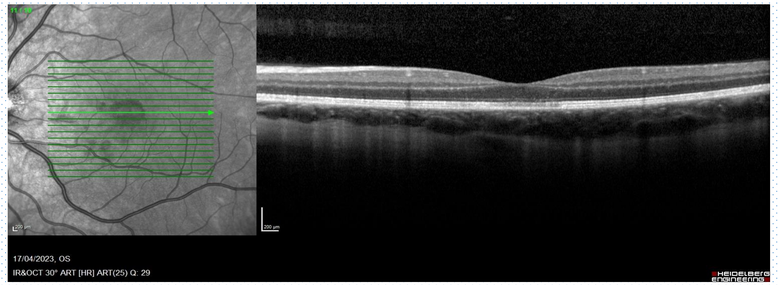


Fig 2: NIR of the left eye



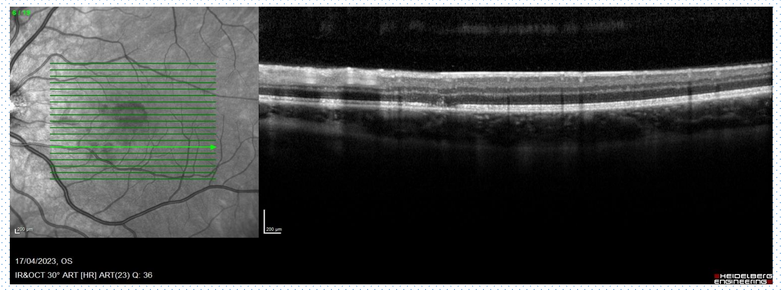


Fig 3 and 4: SD OCT of the left eye

DISCUSSION

•Ocular manifestations of dengue, such as scotomas and blurred vision, can be present in up to 10% of the patients. The main causes are maculopathy and macular edema. AMN is a retinal disease characterized by transient or permanent vision loss, presenting classically with complaints of paracentral scotoma with normal fundus examination. On the other hand, NIR imaging shows “black” or “gray” well-defined margins paramacular petaloid, lesions. OCT commonly finds abnormalities in the outer retina. The mechanisms responsible for this entity are not fully characterized. There is evidence suggesting that vascular compromise of the deep retinal capillary plexus and choriocapillaris are involved. Several triggers have been proposed as causes of the AMN such as dengue fever, anemia, leukemia, and systemic conditions like hypovolemia and dehydration. Knowing this maculopathy and, above all, valuing the patient's complaints is essential for the diagnosis.