







## RETINAL INTRAOCULAR CHANGES ASSOCIATED WITH DENGUE: A CASE REPORT

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### **INTRODUCTION**

Dengue is an endemic disease in Brazil. There are rare ocular complications related to it, such as: subconjunctival hemorrhage; dengue maculopathy; Roth spots; anterior uveitis; microvascular changes; retinal vasculitis; optic neuritis; occlusion of the branch of the central retinal artery, and others.

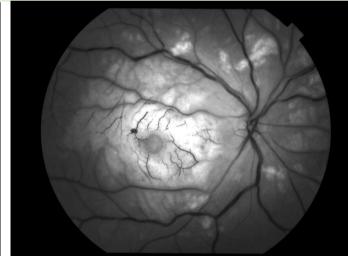
### **METHODS**

Description of a clinical case of an immunodepressed patient with extensive retinal involvement - cotton wool spots, macular ischemia and retinal vasculitis, associated with dengue symptoms. During the investigation- and because of Dengue diagnosis - the conclusion of Purtscher-like was verified.

# **CASE REPORT**

D.V.C.S., 47 years old, male, immunosuppressed due to kidney transplant in the past, medicated with tacrolimus and mycophenolate mofetil. He came to the Retina outpatient clinic of the Hospital Oftalmológico de Brasília with a complaint of low visual acuity in both eyes (BE). On the initial eye examination, in the visual acuity test (VA) the patient could count fingers on the examiner's hand at a distance of two meters ahead in the right eye (RE) and 20/400 in the left eye (LE); intraocular pressure 21mmHg in BE. First, Fundoscopy showed confluent cotton patches, microhemorrhages, retinal edema in the posterior pole. Second, Angiofluoresceinography revealed perivascular extravasation, extensive macular ischemia and areas of capillary non-perfusion. And third, the Macular optical coherence tomography exhibited reflectivity changes in the retinal layers, accumulation of subretinal fluid.



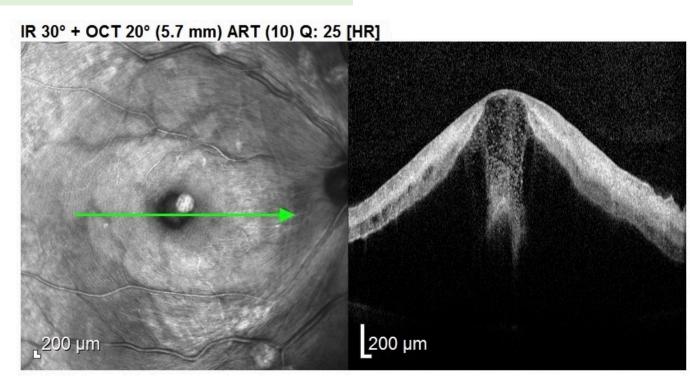


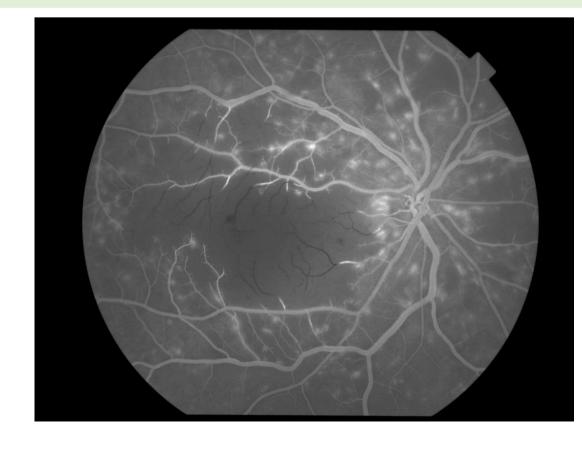




Laboratory tests showed negative results for syphilis and toxoplasmosis, and also for serology for cytomegalovirus and herpes simplex IgG and non-reactive IgM, and for dengue serology for IgM reagent. Then ,the Purtscher-like hypothesis related to Dengue was suggested. So, in the last examination, 26 days after the first consultation, the patient made progress showing the maintenance of his VA in RE and improvement of VA in LE for 20/400. After all, fundscopy showed: a slightly pale optical disc, improvement in the aspect of arterial occlusion, sparse cotton wool spots and absence of neovascularization in BE, despite the fact that in the LE we could still see whitish areas.

The patient maintains mrdical monitoring.







### **DISCUSSION**

Systemic changes during dengue virus infection can produce thromboembolic phenomena, including retinal angiopathy. Although ocular manifestations of dengue are rare, they can become more frequent, with the increased incidence of the disease and the co-circulation of multiple serotypes. Therefore, in endemic areas, as in the context of epidemics, it is important to inquire about dengue symptoms in patients with ocular changes.

### **KEY WORDS**

Dengue Virus; Microvascular Changes; Retinal Edema; Retinopathy

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IR 30° + OCT 20° (5.7 mm) ART (10) Q: 28 [HR]

