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Central Serous Chorioretinopathy Associated with Parvovirus B-19 Infection

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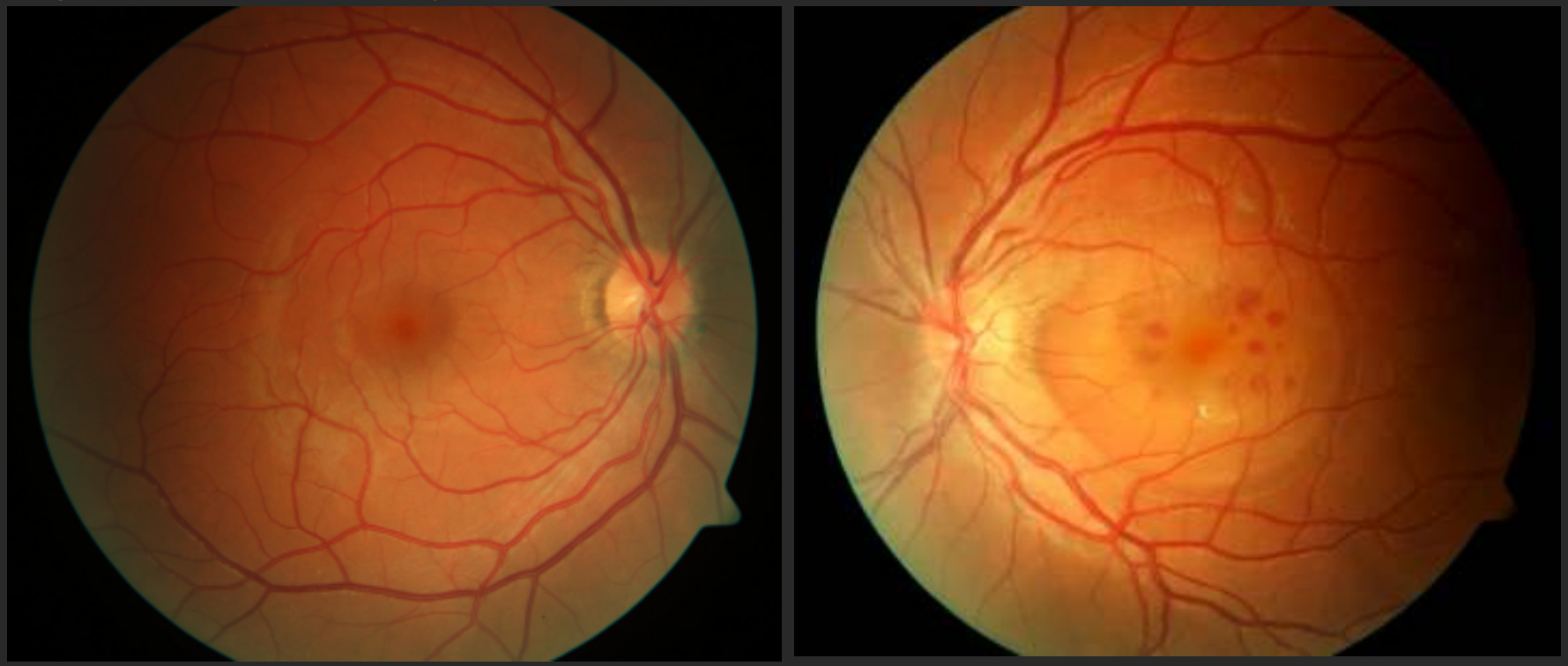
Anamnese:

A 24-year-old white man presented to our clinic with gradual unilateral (left eye) decrease gradual visual acuity to hand movement (HM). He refers a clinical history of influenza symptoms a week before. He refers being in contact with a 3 year old child who had fever and coughing during his family vacation. At the same time, his older brother during the same vacation, had similar influenza symptoms but did not refer any visual disturbance. The patient prior clinical history include congenital deafness of the left ear diagnosed at the age of 4 years old. He does not take medication, and denies arthralgia, rash or insects bits.

Fig. 1 Fundus Biomicroscopy



Clinical and Diagnostic Finding

Clinical Exam:

• Best Corrected Distance Visual Acuity (BCDVA) Left Eye: is hand movement (50 cm).

• Right Eye: BCDVA is 1.0

• Slit lamp biomicroscopy of the anterior segment of both eyes was normal, in particular there were no signs of cell flare or keratic precipitates.

• IntraOcular Pressure (IOP) was normal on both sides.

• Left Eye fundus biomicroscopy revealed a macular round large lesion with subretinal fluid and micro epiretinal hemorrhage (Figure 1). Right Eye fundus biomicroscopy was normal.

Laboratory:

- Hematologic blood count was normal.
- ESR and CRP were normal.

Sierology:

- ANA, ANCA, anti-DNA ,anti-Sm and Reumatoid Factor were negative
- *Parvovirus B19, IgM positive, IgG negative*
- Varicella Zoster IgM negative, IgG positive
- HIV,Treponema pallidum, Borrelia, Brucella, Bart. Henselae, Bart. Quintana,, Citomegalovirus, HTLV-1, HTLV-2 were negative

Fig. 2 OCT (Optical Coherence Tomography) left macula with an image of Central Serous Chorioretinopathy (CSC) with evidence of dome-shaped macula and serous macular detachment. Normal image of right macula.

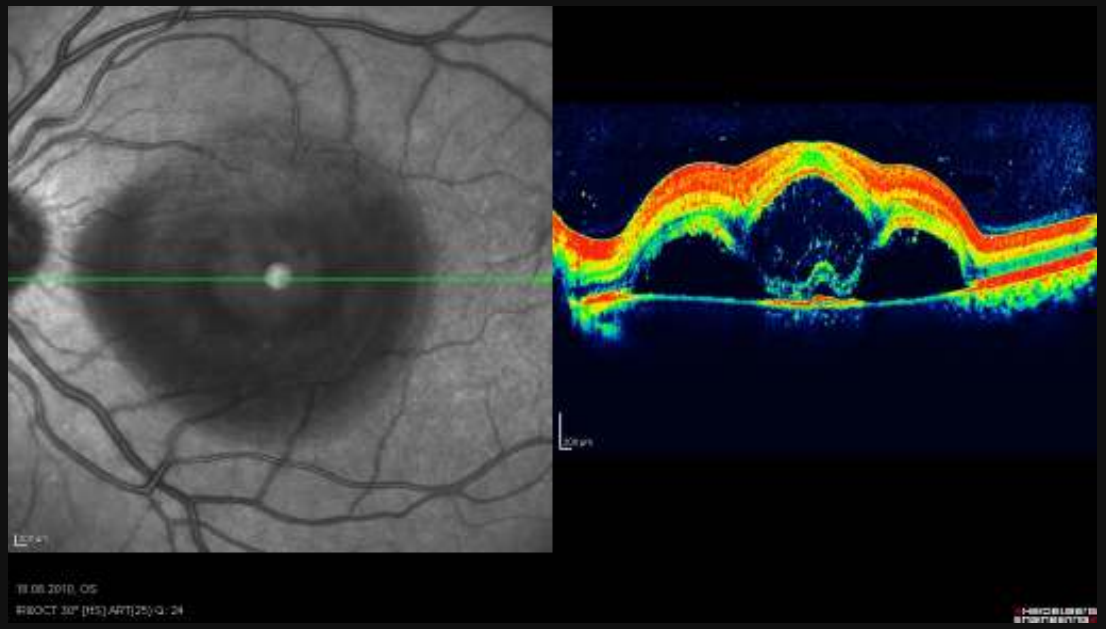
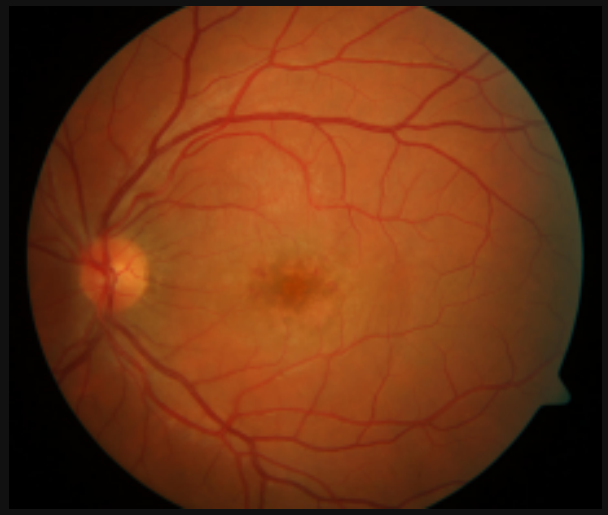


Fig. 3 Fluorescein Angiography (FA) with ICG revealed a pattern of macular subretinal fluid and epiretinal micro hemorrage, with an umbrella pattern compatible of CSC but no pinpoint of focal leakage was recognized. There was no evidence for coroidal ischemie.

Fig. 4: OCT After 6 days presented a rapid regression with a complete disappearance of subretinal liquid



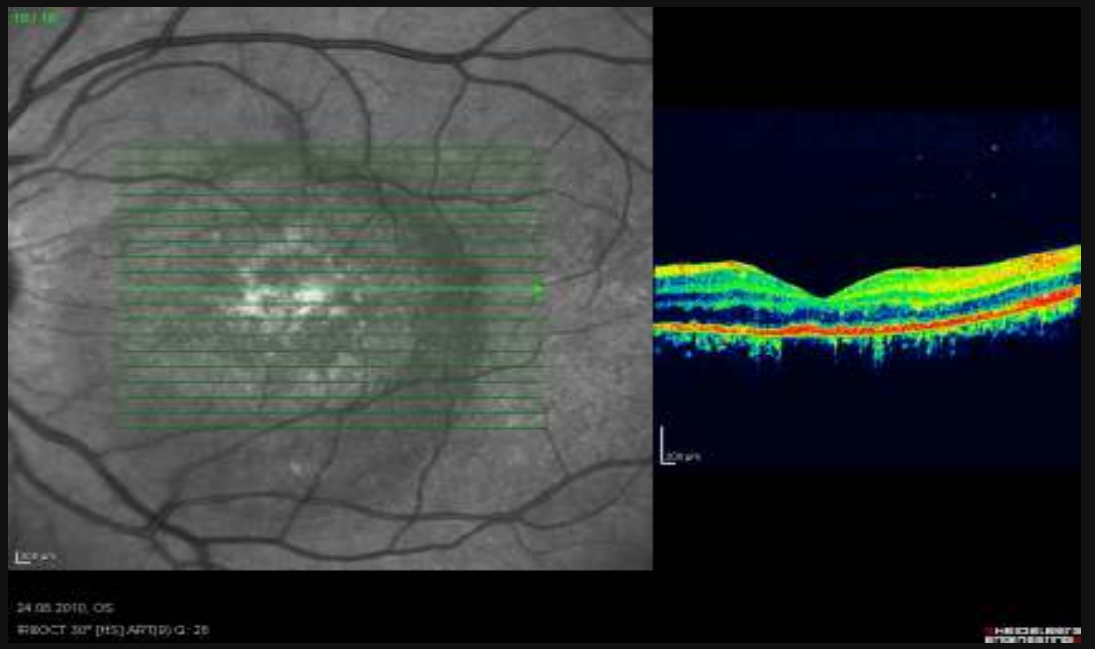
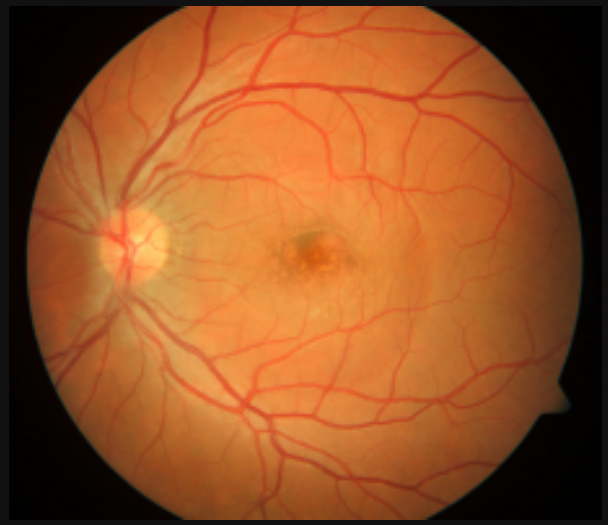


Fig. 5 : FA after 1 Month presented alterations of Retinal Pigmented Epithelium (RPE) in foveal area



CONCLUSION:

In this poster we describe a unilateral visual loss with a CSC characterized by an unusual rapid (6 days) spontaneous resolution followed by a complete visual recovery.

Our patient presented a previous exposure to child affected by an upper respiratory track infection. His labor analysis confirmed a recent parvovirus B-19 infection with IgM positive and IgG negative, while the rest of the sierological and immunological results were negative.

Based on a history of a prodromal illness, and contact with an infected child, a viral etiology has been suspected. Parvovirus B19 is known in the group of virus that can cause a retinal lesion and childhood illness like the Fifth disease.

To our knowledge this is a rare reported case of identified CSC associated with serologically proved parvovirus B19 infection.

We suggest that additional consideration of the presence of acute Parvovirus B-19 infection associated with CSC should be investigated specially when a prodrom of influenza symptoms is present during a community epidemic that involve children.

Further investigation of similar cases will reveal the prevalence of Parvovirus infection involved in retinal pathology.