Valsalva Like Secondary to Seizure

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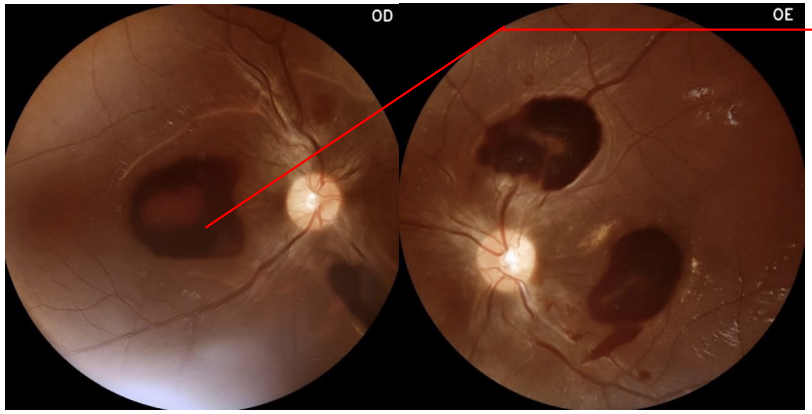
Introduction

Sub-Limiting Internal Membrane Hemorrhage (sub-MLI) occurs in: Valsalva Retinopathy (VR), Terson Syndrome and others. Induced by mechanical injury or pressure gradient associated with central processes. VR is characterized by hemorrhagic LIM detachment, retinal hemorrhage (RH) following sudden increase in intrathoracic (ITP) or intra-abdominal (IAP) pressure - coughing, vomiting or physical activity. Report of VR secondary to seizure.

Case report

Male, 15, hydrocephalus, meningocele and arterial hypertension. He underwent neurosurgery evolved with a seizure and subsequent sudden low visual acuity (VA) in both eyes (BE). On examination, he had a better V A: counting fingers at 1 meter BE. Biomicroscopy and tonometry, are normal. Fundoscopy with BE sub-MLI hemorrhage.

Retinography and OCT of the macula were performed, with subsequent indication of Nd:YAG (NYM) membranotomy. He was hospitalized for 2 weeks to treat pneumonia and afterwards, reported improvement in VA (20/400 BE) with slight absorption of RH. Due to hospitalization and no indication of sedation, he continues to follow up with improvement.



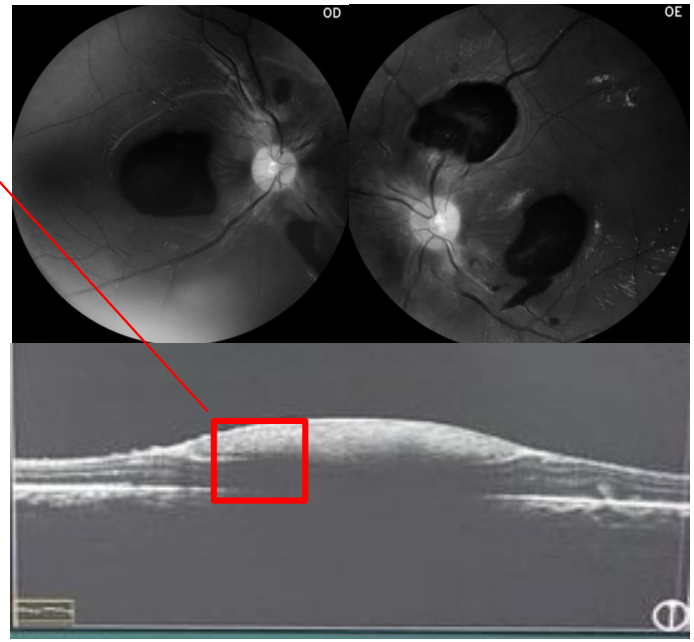


FIGURE 1: RET and AF showing Sub-Limiting Internal Membrane Hemorrhage in macula.

FIGURE 2: OCT

Discussion

VR occurs due to forced expiration against a closed airway. Other causes: sexual intercourse, forceful childbirth, orotracheal intubation (OTI) and seizures. It occurs due to the increase in intraocular venous pressure (IVP), triggered by a sudden increase in ITP, resulting in rupture of capillaries with accumulation of blood between the ILMA and the Nerve Fiber Layer. Patient with low VA after seizure, although rare. Another possibility, also rare, occurred after OTI, even if the patient's complaint refers after seizure. Most of the time, the regression is spontaneous and complete. For quick resolution and/or persistent defect: NYM or VVPP with membrane peel. Although it is not possible to define the cause (seizure or OTI), these rare situations should also be part of the causal hypothesis, even if their treatment is independent of the origin.