

BILATERAL CHOROIDAL RUPTURE SECONDARY TO A GUNSHOT: A CASE REPORT

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PURPOSE

To report a case of indirect bilateral choroidal rupture after trauma with a fire weapon.

METHODS

Case report through analysis of medical records and multimodal exams performed.

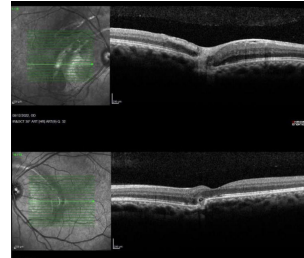
RESULTS

A 34-year-old male patient with a history of gunshot trauma in the face, that occurred 2 months prior, approached our service for ophthalmological consultation. He reported a decrease in visual acuity (VA) in the right eye (OR) since the trauma, without other ocular complaints. He denied systemic or ocular history. On examination, the best-corrected VA was counting fingers in OD and 20/25 in the left eye (OS).

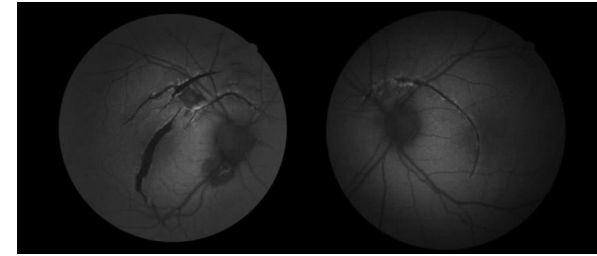
Fundus examination and retinography of the OD showed whitish lines concentric to the optic disc with macular involvement compatible with choroidal rupture and a similar lesion in the OS, but unique and without macular involvement. Autofluorescence and OCT were requested and confirmed the diagnosis of choroidal rupture. A near observation and follow up was indicated for the patient.



Figures 1 and 2: OD and OS color retinography



Figures 3 and 4: OD and OS OCT: loss of continuity of RPE at the site at choroidal rupture.



Figures 5 and 6: OD and OS autofluorescence: hypofluorescence of the lesion with hyperautofluorescence of borders.

DISCUSSION

Choroidal rupture corresponds to a traumatic ophthalmic injury involving the RPE, Bruch's membrane and the choriocapillaris layer of the choroid. The retina and sclera tend to be spared in these attacks, due to anatomical particular characteristics. The rupture can be located directly or indirectly at the site of trauma. The main type is the indirect form, which involves the opposite site of impact and has a typical conformation with a concentric orientation to the optic disc margin. In our case a facial fireweapon injury without direct involvement of the eyeball results in an indirect choroidal rupture.

Multimodal imaging can provide details of the extent of damage and the onset of complications. Frequent associations includes Berlin edema, vitreous and subretinal hemorrhages, which can hinder the diagnosis. Its main complication is the formation of a neovascular membrane, which can occur initially or even years after the initial condition, emphasizing the need for long-term follow-up of these patients.

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