Chorioretinitis Sclopetaria

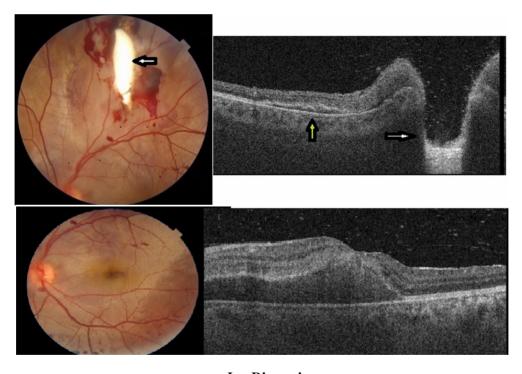
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A 27-Year-old male patient came with chief complaints of diminution of vision in left eye following blunt injury to his left eye with copper wire. The best corrected visual acuity in right and left eye at presentation was 6/6& 1/60. Slit lamp bio microscopy of the ,anterior segment was unremarkable in right eye, left eye revealed lid edema with nasal conjunctival tear with sub conjunctival hemorrhage , pupillary examination was normal .Fundus examination of left eye revealed vitreous hemorrhage with subretinal fluid at macula ,vertical chorioretinal defect along superotemporal arcade with sub retinal hemorrhage supero nasally with commontioretinae .Optical coherence tomography of left eye showed elevated foveal contour with sub retinal fluid at macula , full thickness retino choroidal defect .Patient was managed conservatively



I. Discussion

Chorioretinitis Sclopetaria was first described in 1872 by Herman Cohn, a German Ophthalmologist, as "fusion" of the retina and choroid in the posterior pole which he termed chorioretinitis. In 1901, Goldzieher described the fundus after a periorbital bullet wound as "chorioretinitis plastica sclopetaria."

This is a full-thickness defect involving the choroid, Bruch's membrane, retina, with an intact sclera. Occurs secondary to high velocity object passing near the globe, which creates significant shock waves to retract the choroid and retina with bare sclera at the site of injury

Following blunt trauma Chorioretinitis Sclopetaria is seen at the site of impact (coup injury). commotio retinae, vitreous hemorrhage choroidal rupture occurs at the opposite site of injury (contrecoup injury)

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Pathologically Bruch's membrane is inelastic and ruptures easily with compressive forces. The choriocapillaris is attached to this membrane leads to acute subretinal hemorrhage. Retinal Pigment Epithelium is also inelastic, making rupture also more likely. Retina and Sclera are elastic thus very high impact energy, is necessary to cause disruption and damage.²

Management of sclopetaria: patients may be carefully observed as the retinal ruptures heal themselves due to the large degree of glial proliferation at the site of the injury. Surgical intervention is required if there is concern for globe rupture, retinal detachment along with sclopetaria.³⁴

I. Conclusion

The rare occurrence of sclopetaria following copper wire injury makes this case unique.

References

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