Sclopetaria with retinal folds

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DESCRIPTION

A 41-year-old man with a history of bullet injury 1 month ago was evaluated for decreased vision in the right eye. The patient's left eye was normal. Best-corrected visual acuity was 20/200 in the right eye. The dilated fundus showed the temporal area of bare sclera, surrounding pigmentation, overlying resolving vitreous haemorrhage and radial retinal folds extending towards the posterior pole (figure 1). These folds led to macular drag and narrowing of temporal vascular arcades. Vertical optical coherence tomography scan (figure 2) of the macula showed retinal folds with shallow neurosensory detachment. A diagnosis of sclopetaria with tractional retinal detachment was made. The patient was informed regarding the poor visual prognosis in the right eye in view of macular involvement, and no surgical intervention was made.

Figure 1 Ultrawide field pseudocolour image showing temporal area of bare sclera with surrounding pigmentation and retinal folds extending to the fovea (white line shows the direction of the optical coherence tomography scan).

Figure 2 Vertical optical coherence tomography scan shows retinal folds with shallow neurosensory detachment.

Patient's perspective

Fundus imaging and optical coherence tomography images enabled me to better understand the cause of diminution of vision and its prognosis.

Learning points

- ▶ Sclopetaria due to significant scarring and dense adhesion can also be associated with radial retinal folds.
- ▶ The extension of the retinal folds to the macula area and associated drag can cause diminution of vision in these cases.

Sclopetaria involves rupture of the retina and choroid after non-penetrating ocular trauma with high-velocity projectile tangential to globe. The coup injury leads to stresses exceeding tensile strength of the retina and choroid, causing it to rupture but not relatively elastic posterior hyaloid or sclera. It can be associated with vitreous, intra-retinal or subretinal haemorrhage.¹ In spite of the severe chorioretinal trauma, retinal detachment is rarely seen in these cases because of the firm adhesion of the retina and choroid at the area of involvement.² The scarring at the edge of the sclopetaria is the probable cause of retinal folds in this case, which led to diminution of vision.

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REFERENCES

- 1 Goldzieher W. Beitrag zur Pathologie Der orbitalen Schussverletzungen. *Z Augenheilkd* 1901;6:277–85.
- 2 Ahmadabadi MN, Karkhaneh R, Roohipour R, et al. Clinical presentation and outcome of chorioretinitis sclopetaria: a case series study. *Injury* 2010;41:82–5.

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