

Post-traumatic posterior giant retinal tear and macular hole associated retinal detachment

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Abstract

Background: Blunt trauma to the eye can present with varied manifestations involving both the anterior and posterior segments of the eye. Giant retinal tear (GRT) following trauma occurs most commonly at the equatorial region or anterior to the equator. GRT posterior to the equator is rare.

Purpose: To demonstrate the successful management of a post-traumatic posterior GRT and full-thickness macular hole (MH) associated retinal detachment (RD). **Synopsis:** A 21-year-old-male presented with sudden diminution of vision in the right eye (RE) following blunt-trauma with cricket ball. RE vision at presentation was hand movement close to face. Anterior segment of RE revealed pupillary sphincter tear, posterior synechiae and posterior subcapsular cataract (PSC). RE fundus revealed a posterior-GRT, full thickness MH, mild vitreous haemorrhage and rhegmatogenous RD. He was managed with pars plana vitrectomy, encircling scleral band, perfluorocarbon liquid-assisted flattening of GRT, internal limiting membrane peeling, and endotamponade. Post-operatively the retina was attached, MH was closed and the patient achieved an ambulatory vision of 1/60. **Highlights:** This video demonstrates the successful management of a posterior-GRT and MH associated RD. Removal of adherent hyaloid from the long anterior flap of posterior GRT, peeling of ILM from temporal narrow mobile strip of retina (which has a risk of radial extension of GRT edges) and manoeuvring in suboptimally dilated pupil are illustrated in this video.

Video Link: <https://youtu.be/p04-t0Wuuc>

Key words: giant retinal tear, posterior giant retinal tear, blunt trauma, retinal detachment, macular hole

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