TRAUMATIC MACULAR HOLE
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Traumatic macular holes usually occur following blunt ocular trauma, but other causes have also been reported, including accidental laser injuries, lightning and electrical shock. The pathogenesis in blunt trauma was not definitely established, but it is possible that the acute compression-decompression force exerted on the globe may cause local posterior vitreous detachment, leading to dehiscence in the fovea or to avulsion of a small operculum. These holes usually develop shortly after the blunt trauma, and are often located within an area of pigment changes induced by the associated traumatic edema in the posterior pole. In laser injury the macular hole results from coagulation necrosis following the intense laser burn, and the hole can develop in the days or weeks following the injury.

The surgical management of traumatic macular holes is similar to that of idiopathic macular holes, and includes vitrectomy, ILM peeling, and fluid-gas exchange. As many of these patients are young it is often necessary to perform a mechanical removal of the posterior cortical vitreous. Selection of cases and timing of surgery are important, and the anatomical and functional outcomes often depend on associated trauma-related ocular pathologies. In following these patients it is important to remember that spontaneous closure of the hole can occur but is not common, and surgery should not be deferred for too long, as long standing holes are associated with poor prognosis.

Question:
A 27 years old mail sustained a football trauma to his right eye. Two days later a macular hole was observed (and documented on OCT). The posterior pole was white from traumatic retinal edema. The visual acuity was 20/100. The preferred management of this case will be:
1. Immediate vitrectomy with laser on the edges of the hole
2. This patient should be observed indefinitely as most traumatic macular holes close spontaneously
3. After a short observation period of 2-6 weeks vitrectomy with ILM peeling and gas exchange should be performed
4. After a short observation period of 2-6 weeks vitrectomy and silicone oil injection should be performed