Superior scleral perforation associated with the presence of an intraocular metallic foreign body: Case Report

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PURPOSE

Describing a complex case involving a patient who sustained a penetrating eye injury with the presence of an intraocular foreign body.

METHODS

Thorough research in existing literature has been conducted, and a detailed case study will be featured.

DISCUSSION

Effective management requires a careful surgical approach, encompassing procedures such as posterior vitrectomy and precise extraction of the foreign object using suitable instruments. It is imperative to actively prevent further complications, such as endophthalmitis. This synopsis underscores the importance of early intervention in the treatment of intraocular foreign bodies.

RESULTS

Male, 62 years old, with a history of penetrating ocular trauma in the left eye with a metal grinder, presented to the ophthalmology service in May 2023, complaining of a sensation of a foreign body. On examination, he had corrected visual acuity (VA) of 20/20 in both eyes (OU), intraocular pressure of 12 mmHg in OU, biomicroscopy revealed localized redness in the superior region of the sclera at 12 o'clock, without seidel sign, anterior chamber with slight reaction, phakic. A cranial and orbital computed tomography scan showed an intraocular metallic artifact at the level of the superior posterior chamber, juxtaposed to the sclera, measuring approximately 1.5 mm. Fundoscopy revealed well-defined optic disc, macula without alterations, superior vitreous hemorrhage with adhered vitreous membranes, and attached retina. Ultrasound examination showed reverberations in the superior vitreous with acoustic shadow suggestive of a foreign body. Mild vitreous hemorrhage was observed with a metallic foreign body adhered to the superior nasal sclera with perilesional retinal detachment. Pars plana vitrectomy was performed, foreign body removal using an electromagnet via sclerotomies, laser photocoagulation for lesion blockade, associated with phacoemulsification in the same procedure. The patient progressed to VA of 20/20, and fundoscopy showed attached retina.

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IMAGES

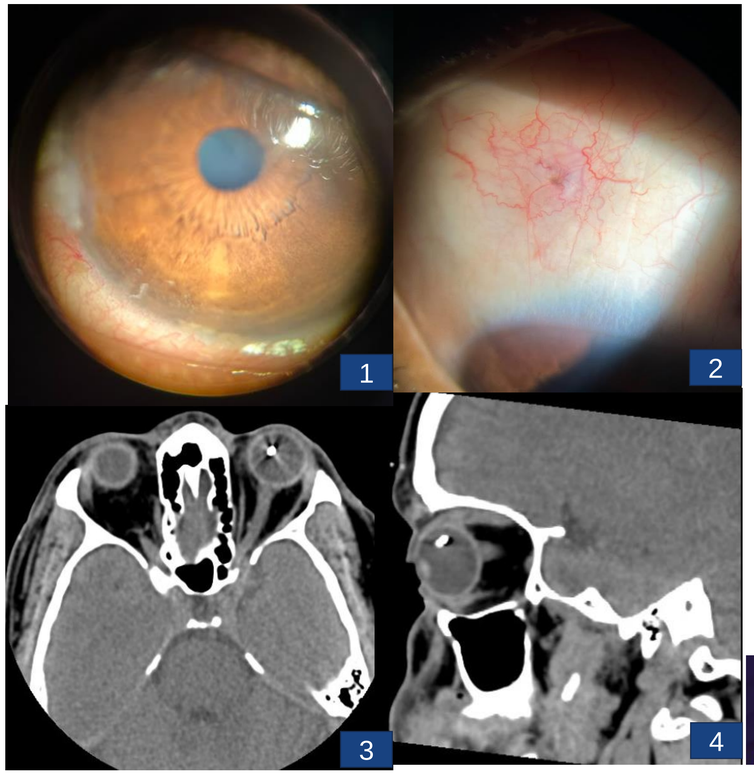

Image 1:The first image of the patient's biomicroscopy demonstrates a relatively quiet eye, with minimal chamber reaction and apparently no significant alterations.
Image 2: The second image of the biomicroscopy demonstrates the entry area of the foreign body in the superior sclera at 12 o'clock, showing localized hyperemia.
Image 3: Cranial and orbital tomography showing the presence of an intraocular foreign body.
Image 4: Detailed image of the cranial and orbital tomography showing a foreign body in the superior portion of the eye.