

Intraocular foreign body extending to the retrobulbar fat, challenging approach and outcome: case report

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PURPOSE

Describing a challenging case report of a patient with penetrating ocular trauma and the presence of an intraocular foreign body.

METHODS

Extensive literature review was conducted, and a case report will be presented.

DISCUSSION

Intraocular foreign bodies (IOFBs) represent an ophthalmic emergency that can result in significant vision loss if not promptly diagnosed and treated. Prevention of additional complications, such as endophthalmitis and secondary glaucoma, is essential. This summary highlights the importance of swift identification in IOFB treatment to preserve visual function.

RESULTS

Patient, male, 32 years old, with a history of ocular trauma in the right eye (OD) with a metallic object, presented to the ophthalmology service on June 6th, 2022, complaining of ocular pain and redness associated with decreased visual acuity. On examination, he had visual acuity (VA) of finger counting at 5 meters in OD and 20/20 in the left eye (OS), intraocular pressure of 12 in both eyes, biomicroscopy revealed a nasal scleral laceration with positive seidel test and a lamellar hyphema in the anterior chamber. A orbital computed tomography scan was performed, revealing a hyperdense linear image, metallic in appearance, in the midline projection of the right eyeball, measuring approximately 18 mm in its longest axis, extending along the medial margin towards the ipsilateral intraconal fat region. Fundoscopy evaluation was impaired due to pain and media opacity. Intraoperatively, a significant amount of vitreous hemorrhage was observed, with a metallic foreign body embedded in the inferior nasal periphery of the posterior pole associated with perilesional retinal detachment. Pars plana vitrectomy was performed with membranectomy, foreign body removal using an anteriorly placed electromagnet, laser photocoagulation for lesion blockade, and phacoemulsification with intraocular lens implantation. The patient progressed to hand motion visual acuity in OD, without pain, and fundoscopy showed attached retina.

IMAGES

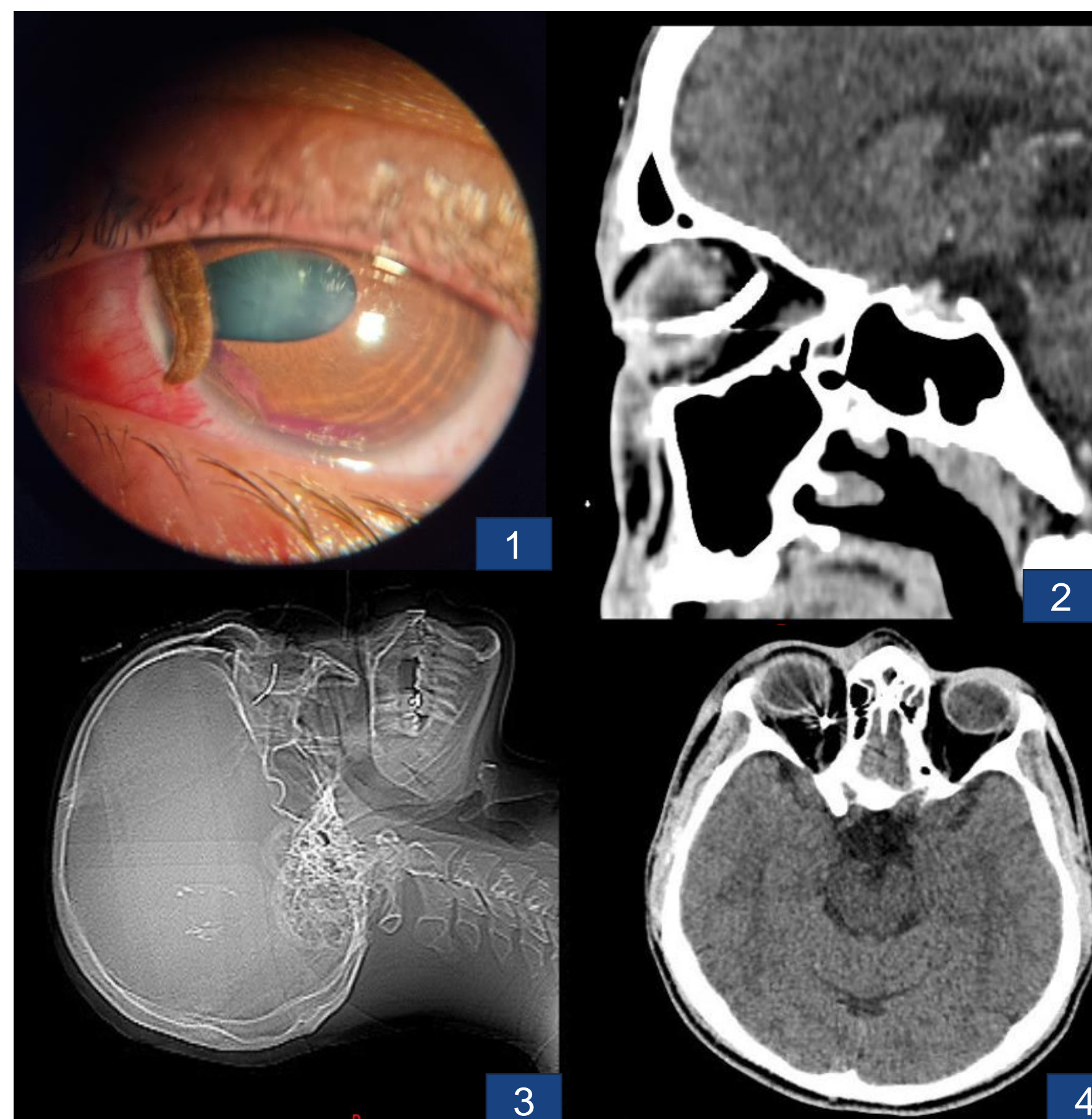


Image 1: demonstrates the biomicroscopic evaluation of the patient with corneal and scleral perforation with iris tamponade, as well as lamellar hyphema and iris corectopia.

Image 2: Cranial and orbital tomography showing intraocular foreign body within the intraconal fat.

Image 3: X-ray showing the depth of the foreign body.

Image 4: Cranial tomography showing detail of the foreign body in its intraconal portion.