



Chorioretinitis sclopetaria following accidental gunshot injury

Case Presentation

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Introduction

Lodgment of a bullet within the orbit is uncommon. The decision to remove the object presents a challenge due the risk of surgical complications.

Report

A 17-year-old male was shot below the left cheek. On presentation he had right periorbital swelling and complained of floaters. Visual acuity was 20/60 and 20/20 OD and OS respectively. IOP was 14 and 15. Trace RAPD OD was noted. Fundus exam showed optic disc hyperemia but no edema, with nasal disc heme. Commotio involving the inferior macula involving the fovea was present. X-ray showed retained bullet and CT showed a 1.5 cm bullet in the intraconal space between the lateral rectus and optic nerve (Figure 1, 2). The patient was treated with IV steroids and antibiotics and observed. Four days later visual acuity was 20/70 and 20/25 OD and OS respectively, and IOP was normal. The retina was attached. Fundus exam confirmed the presence of subretinal, preretinal, and intraretinal hemorrhage (Figure 3). OCT showed IS/OS loss in the inferonasal macula, and a pocket of subretinal fluid near the nerve inferiorly (Figure 4). A diagnosis of chorioretinitis sclopetaria was made.

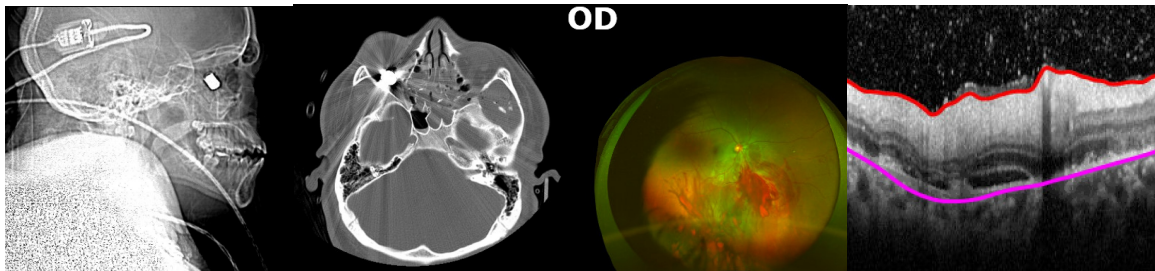


Figure 1

Figure 2

Figure 3

Figure 4

Discussion

Three weeks after injury the patient's vision OD was still impaired. He was not in pain, extraocular movement was full, and the decision was made to leave the bullet in place.

- The risk of retinal detachment in chorioretinitis sclopetaria is felt to be low based on (1) the choroid and retina appear to retract as a single unit (2) posterior hyaloid remains intact over the region of the rupture and (3) patients are usually young and have formed vitreous.¹
- Surgery may be indicated if there are acute or chronic functional restrictions, or infectious or inflammatory reactions.
- Longitudinal tolerance of metallic orbital foreign bodies adjacent to the optic nerve has been noted in previous cases.²

Conclusion

Traumatic chorioretinitis sclopetaria can occur after a high-velocity missile passes adjacent to the globe. Observation alone may be adequate given the risk of surgical intervention.

References

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2. Siedlecki AN, Tsui E, Deng J, Miller DM. Long-Term Retention of an Intraorbital Metallic Foreign Body Adjacent to the Optic Nerve. *Case Rep Ophthalmol Med*. 2016;2016:3918592. doi:10.1155/2016/3918592