BMJ Case Reports

Images in...

The best treatment can be no treatment: retained retro-orbital air gun pellet following attempted suicide

Hugh Jewsbury,[1] Des O'Duffy[2]

[1]Department of Ophthalmology, HM Stanley Hospital, St Asaph, UK;
[2]Department of Ophthalmology, Royal Gwent Hospital, Newport, UK

Correspondence to Hugh Jewsbury, hughjewsbury@hotmail.com

DESCRIPTION

A 35-year-old man presented after shooting himself in the right orbit with an air rifle following an attempted suicide. His visual acuity was 6/5 in the right eye and 6/6 in the left. An entry wound was noted on the medial aspect of the upper lid. The anterior segment was otherwise unremarkable. Examination of the posterior segment revealed no significant abnormalities. There was no restriction of ocular motility. X-rays demonstrated a retro-orbital metallic foreign body (figure 1). This was shown to lie above the lateral rectus and behind the globe on a subsequent CT scan (figure 2). He was treated with broad-spectrum antibiotics and the pellet was not removed as the risk of surgery outweighed the benefit.

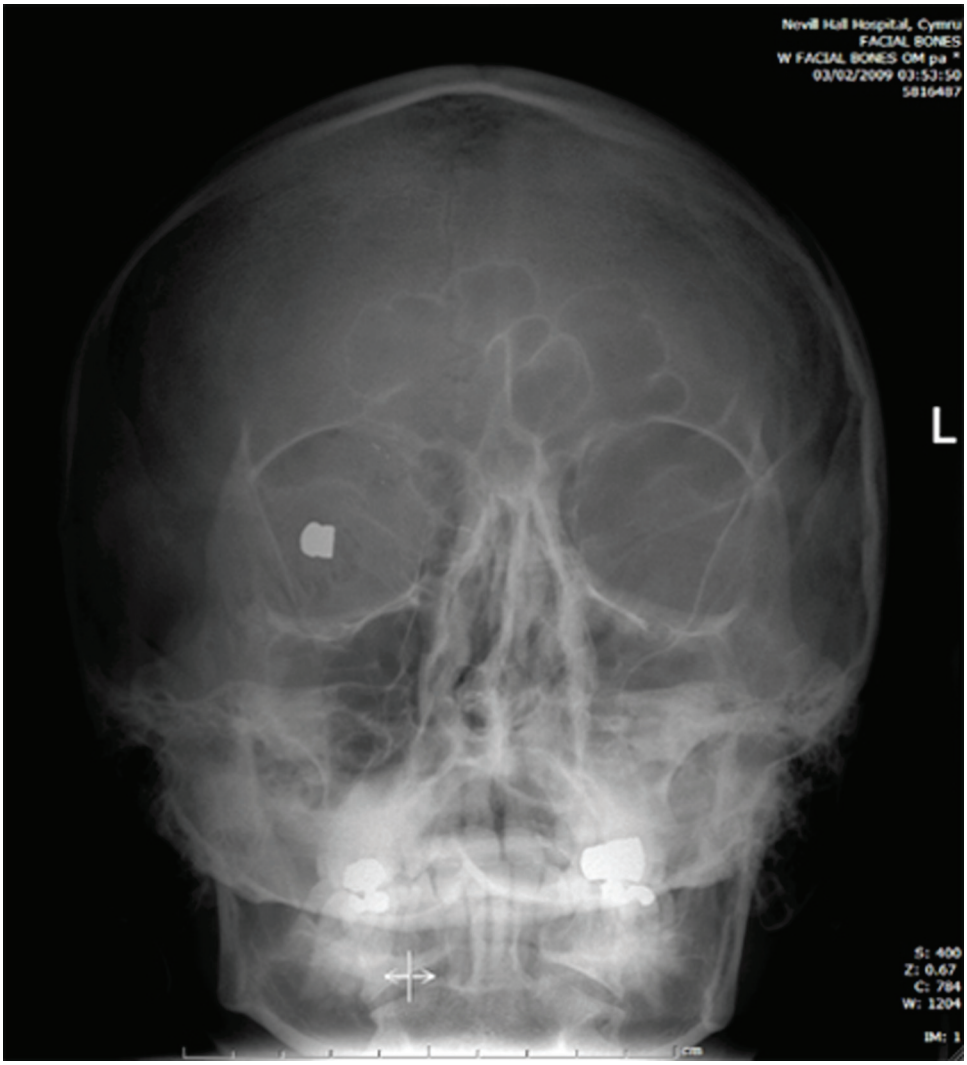

Figure 1 Plain x-ray of facial bones showing retained air rifle pellet.

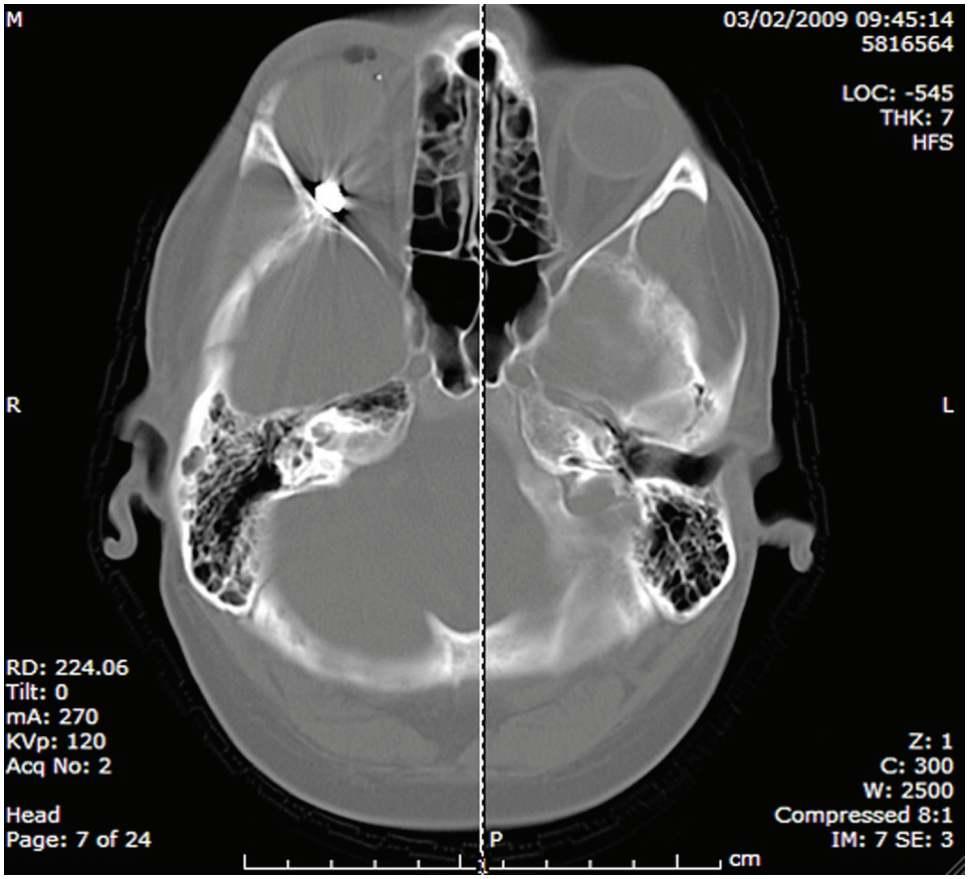

Figure 2 CT revealed the precise location above the right lateral rectus muscle and behind the globe.

The retained pellet was composed of lead. There are no reported cases of systemic lead toxicity following orbital retention but this remains a theoretical risk.[1] Most metals are inert but certain metals pose specific problems. Retention of ferromagnetic metals will impede future MRI, while retention of iron is associated with siderosis and copper with purulent orbital inflammation.[1] Unless there is a specific indication relating to the type of metal retained, removal of retro-orbital, inorganic foreign bodies should only be considered in the presence of adverse effects from retention. These indications include orbital inflammation, infection, optic nerve compromise or restricted ocular motility.[1–3]

This is a very unusual and fortuitous presentation of an ocular air gun injury and demonstrates that conservative management in such circumstances can be most effective.

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **Ho VH,** Wilson MW, Fleming JC, *et al*. Retained intraorbital metallic foreign bodies. *Ophthal Plast Reconstr Surg* 2004;**20**:232–6.
2. **Fulcher TP,** McNab AA, Sullivan TJ. Clinical features and management of intraorbital foreign bodies. *Ophthalmology* 2002;**109**:494–500.
3. **Finkelstein M,** Legmann A, Rubin PA. Projectile metallic foreign bodies in the orbit: a retrospective study of epidemiologic factors, management, and outcomes. *Ophthalmology* 1997;**104**:96–103.