An incidental case of asymptomatic intracranial foreign body on CT

Mehmet Deveer,¹ Fatmagul Imamoglu,² Cetin Imamoglu,² Sarper Okten³

¹Department of Radiology, Faculty of Medicine, Mugla Sıtkı Kocman University, Mugla, Turkey

²Department of Radiology, Yunus Emre State Hospital, Eskisehir, Turkey

³Department of Radiology, Türkiye Yüksek İhtisas Hospital, Ankara, Turkey

Correspondence to

Dr Mehmet Deveer, deveer3@hotmail.com

DESCRIPTION

Although not common, cases of foreign bodies are important and interesting. Foreign bodies enter the body by trauma or iatrogenic injuries. Because of the thin nature of the bony orbital skeleton, intracranial pencil injuries are often transorbital.¹ This article was to present a case of intracranial foreign body in a CT obtained from a patient with presyncope after over-exertion.

A non-contrast and contrast-enhancing CT was obtained from a 43-year-old man, who suffered only once 3 days earlier from a presyncope, otherwise with healthy work-life and sport-life.

A 56 mm long foreign body with regular borders and sharp tip, entering the right frontal lobe adjacent to the putamen with a defect on the right sphenoid bone, reaching to corona radiata with a hyperdense surrounding and free air was seen on the axial and reformed cross-sectional CT images (figures 1–3).

After the CT scan, the patient was questioned again and we were informed that 14 years earlier the patient fell and a pen penetrated his right orbital. The right globe was tomographically normal. No areas of intracranial haematoma or encephalomalacia were seen. The asymptomatic nature of the foreign body may be due to the good tolerance of plastic objects in the body, not injuring any vascular structures and its localisation on the right lobe (figure 4).

Figure 1 A defect of the sphenoid bone (A) and a foreign body (B) on the neighbouring brain parenchyma is seen on the contrast-enhancing CT cross sections.

Figure 2 A foreign body is seen at the level of the basal ganglia on non-contrast CT.

Figure 3 The image of the foreign body on the volume rendering (A) and multiplanar reformatted CT (B).

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Figure 4 According to the reformatted multiplanar reformatted CT images, although the foreign body was close to vascular structures no vascular injuries were caused.

Learning point

Because of the thin nature of the bony orbital skeleton, intracranial pencil injuries are often transorbital. Especially in penetrating orbital traumas, a brain CT should be obtained for the evaluation of intracranial foreign objects even if the patients appears asymptomatic.

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Competing interests None.

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