Impacted intranasal foreign body causing orbital cellulitis and mistaken for orbital pathology

Sir,

A 2-year-old girl presented to emergency department, with the complaint of swelling of her left eye for the last 2 days. She was unable to open her left eye. Physical examination revealed marked oedema and ecchymosis of left lower eyelid, severely limiting eye opening – nonfluctuant, tender, erythematous oedema extended from the left one half of the nose to the right mandible and periorbital region. No healing varicella lesions were noted in this area of the face. The left nasal mucosa was swollen, and detailed examination was obscured due to oedema.

A provisional diagnosis of periorbital cellulitis was made and she was started on antibiotics; however, the swelling increased. CT scan was requested to look for any periosteal collection/orbital cellulitis.

Contrast-enhanced CT scan [Figure 1a,b] was performed under short general anaesthesia, which revealed a well-defined rounded metallic foreign body, measuring 1.3 x 1.2 cm, in the left nasal cavity. Thickening of the soft tissues of the cheek (infra orbital maxillary region) and pre-septal space of the left orbit was seen. However, no definite collection was seen. No bony fracture/septal perforation were identified. Subsequently, the metallic foreign body was removed in the CT room by the anaesthetic team and was found to be a rounded metallic battery.

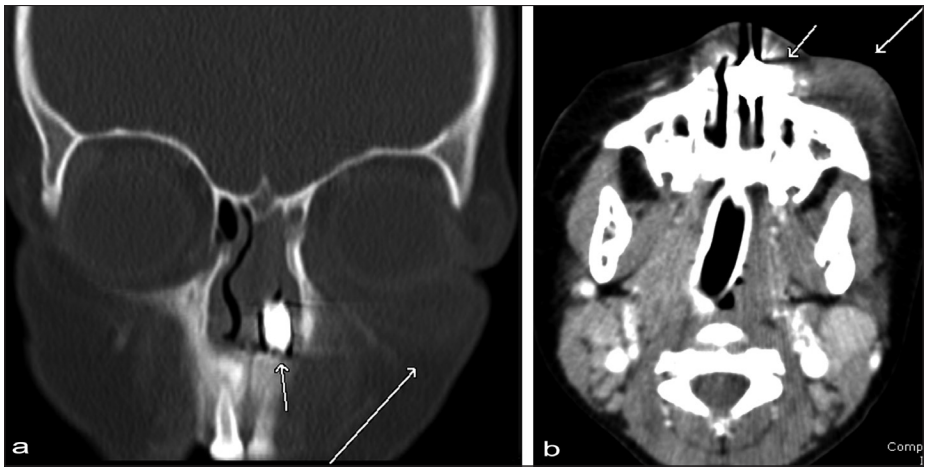


Figure 1: Contrast-enhanced CT – coronal (a) and axial (b) – images (bony and soft tissue windows) reveal an intranasal metallic foreign body (small arrow), with marked thickening and inflammation of the periorbital and infraorbital soft tissues (long arrow).

Button batteries as nasal foreign bodies have the potential for significant morbidity. It can cause rapid tissue destruction and aggressive diagnostic evaluation and management (removal of battery) are recommended by most authors.[1,2]

Mechanism of injury by foreign bodies in these patients includes leakage of battery contents (direct corrosive damage), production of local currents and direct current burns (tissue necrosis).[1,2]

Easy availability of these small batteries in our household raises concern, and differential diagnosis for periorbital and forehead pain and swelling as occurred in our patient should include nasal foreign body in children. Its potential for rapid tissue destruction and septal perforations/ulcerations mandates early removal of button batteries.[1,2]

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