CASE REPORT

Late Presentation of Transorbital Maxillary Sinus Foreign Body

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Abstract

Objective: We describe an unusual case where we found a broken pen 20 years after trauma causing cicatricial ectropion and mimicking osteomyelitis.

Methods: Case reports

Results: A 60-year-old male presented with 6 months history of epiphora and cheek hypoesthesia after a 3 months old discharging sinus had healed causing cicatricial ectropion of left lower eyelid. He also gave history of road traffic accident 20 years ago with injury at the same site that had healed. Clinical diagnosis of maxillary sinus osteomyelitis was made and computerized tomographic (CT) scan revealed a suspicious foreign body extending from the orbit into the maxillary sinus. Infraorbital incision and endoscopic approach were used to remove the 4 cm long broken pen.

Conclusion: Penetrating injuries, however trivial they may appear, need to be investigated further with a CT scan to detect foreign bodies early and prevent late complications.

Keywords: Foreign body, transorbital, maxillary sinus, complications.

INTRODUCTION

Maxillary sinus foreign bodies are not uncommon. Penetrating facial injuries can have underlying paranasal sinus or orbital foreign bodies. Transorbital maxillary sinus foreign bodies are rare. Delayed presentation of paranasal sinus or orbital foreign bodies is extremely rare with only 3 cases being reported in English Literature.[1-3] We describe an unusual case where we found a broken pen, 20 years after trauma, causing cicatricial ectropion and mimicking osteomyelitis.

CASE REPORT

A 60-year-old male presented with complaints of watering from left eye, dull pain and decreased sensation over left cheek for 5 months. Since 3 months he noticed a discharging sinus in the left cheek just below the eye. He had no nasal complaints. Examination revealed an ectropion of left lower eyelid and a 1.5 cm linear scar at level of infraorbital margin with small sinus opening within scar (Fig. 1). There was surrounding induration. Visual acuity and extraocular movements were within normal limits. Hypoesthesia, to pin prick and touch, was noted on left cheek and anterior teeth (incisors and canine). Nasal cavity examination did not reveal

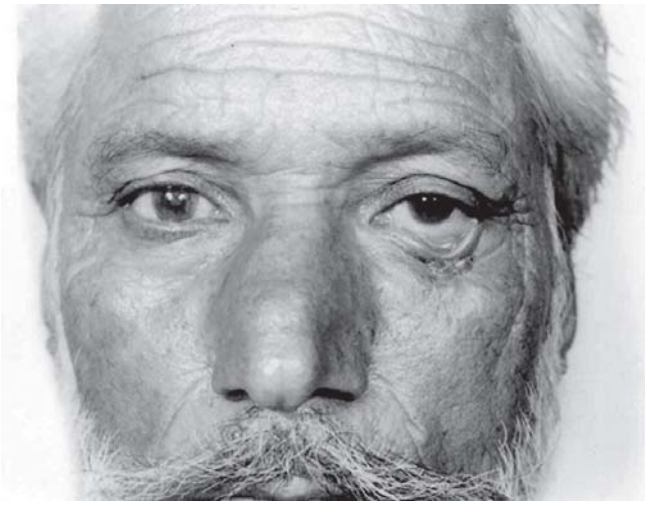
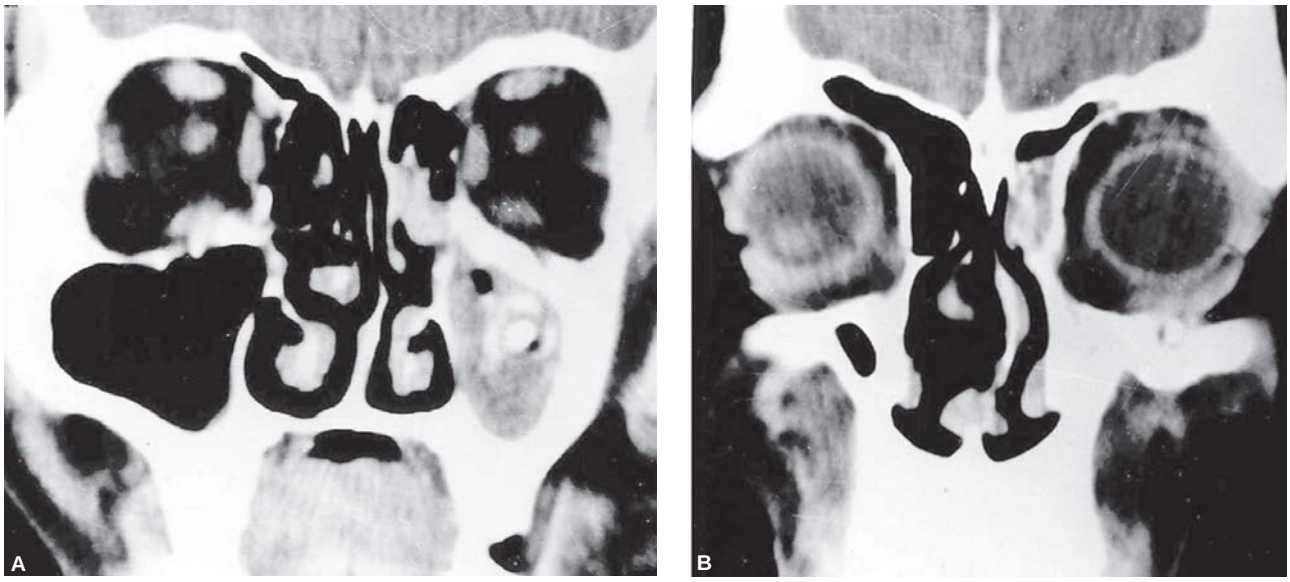


Figure 1: The ectropion, scar and sinus



Figures 2A and B: Coronal section of CT scan (A) Anterior section: Round hyperdense opacity at floor of orbit and (B) Posterior section: Target shaped hyperdense opacity and secretions within maxillary sinus

Figure 3: The pen and refill separately

any abnormality. Clinical diagnosis of osteomyelitis was made. CT scan revealed a hyperdense foreign body extending just above the inferior orbital rim to the posteroinferior part of maxillary sinus with surrounding hypodense opacity completely filling the maxillary sinus suggestive of sinusitis (Figs 2A and B). Further questioning revealed that he met with an accident 20 years ago. The truck, he was driving, collided into the rear of another vehicle. He had loss of consciousness for few minutes. Glass splinter had inflicted a laceration on left cheek. Patient did not consult any doctor, the laceration had healed and he was symptom free all these years. Subciliary incision was used to excise the sinus opening and the foreign body. Just beneath the skin a broken, 4 cm long, green coloured ballpoint pen was seen obliquely placed with the nib end in the maxillary sinus (Fig. 3). There was firmly adherent scar tissue all around the foreign body that was also removed. Using nasal endoscopes uncinectomy and wide middle meatal antrostomy was done. Skin was undermined and wound closed in layers. Postoperatively ectropion persisted for which he was referred to the oculoplastic surgeons. In 6 weeks, the sensation of the left cheek had returned to normal and pain had subsided.

DISCUSSION

Transorbital maxillary sinus foreign bodies have been reported before.[4] Ballpoint pens have lodged in ethmoid and sphenoid sinuses.[5,6] Thorough literature search has revealed only 3 cases of unusually delayed presentation. First was a 12-year old child who presented with cheek swelling and pain 4½ years after trauma, was found to have a straight pin in periapical region of maxillary central incisor.[1] Second case was an orbital foreign body presented, 5 years after trauma by a wooden stick, with a firm nodule above medial canthus.[2] Third case had a 10 cm long steel nail in the maxilla, which was detected on a radiography performed for investigating the cause for his cheek ache. He was assaulted 10 years ago.[3] Foreign bodies should be extracted as they can lead to recurrent or chronic infection and lead poisoning, in case of bullets.[7,8] The retained bodies should be removed under vision and not pulled to minimize complications.

CONCLUSION

Penetrating facial injuries, however trivial they may appear, need to be investigated further with a CT scan, to detect foreign bodies early and prevent late complications.

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