Transorbital Removal of Foreign Body in the Sphenoid Sinus

ABSTRACT

Objectives: To report a case of foreign body lodged within the sphenoid sinus and its extraction.

Methods:

Design: Case Report
Setting: Tertiary Government Hospital
Patient: One

Results: An 11-year-old girl was hit in the eye by an unknown object from an improvised slingshot. She had loss of vision of the left eye and headache without loss of consciousness. A plain craniofacial Computed Tomography (CT) scan showed a round opaque foreign body abutting the left sphenoid sinus, left posterior ethmoid cells and medial aspect of the left orbital region with adjacent soft tissue densities extending into the apparently ruptured, irregular left globe. The left posterior part of the lamina papyracea was not visualized probably fractured or ruptured. Transorbital enucleation of the left eye and endoscopy-assisted removal of the foreign body (a glass marble) were performed with no intra – operative and post – operative complications.

Conclusion: Foreign body of the sphenoid sinus is a rare condition. Adequate imaging is important for localization and planning the optimal surgical approach. Endoscopic guidance may aid in extraction.

Keywords: Sphenoid sinus foreign body, Computed Tomography (CT), Endoscopic-guided, transorbital approach

The sphenoid sinuses lie deep within the skull and behind the ethmoid air cells. The orbit, frontal and maxillary sinuses are the most commonly involved structures with penetrating foreign bodies. Foreign body of the sphenoid sinus is a rare condition and most of the documented cases are shrapnel wounds.

We describe a non-shrapnel foreign body lodged within the sphenoid sinus.

CASE REPORT

An 11-year-old girl was hit in the left eye by an unknown projectile from an improvised slingshot leading to loss of vision and accompanying left-sided headache without loss of consciousness.

Physical examination after one month revealed a ruptured left globe. There was no light perception in the left eye while the right had 20/20 vision. (Figure 1) No visible entry wound or scar was seen. The neurologic examination was otherwise normal.

A plain craniofacial CT Scan revealed a round opaque foreign body abutting the left sphenoid sinus, left posterior ethmoid cells and medial aspect of the left orbital region with adjacent soft