MISSED WOODEN INTRA-ORBITAL FOREIGN BODY: A DIAGNOSTIC CHALLENGE

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PRESENTATION OF CASE

A forty-five-year-old male presented to the outpatient department with persistent swelling and a discharging wound in the left upper eyelid since the past one year. He had a history of an injury while chopping wood one year ago after which he had a lacerated wound in his upper lid which was treated at a local hospital.

An orbital exploration was done but no FB was removed. He was discharged.

At the present visit, he was unable to open his eye and had a discharging sinus at the medial side of his left upper lid. Clinically there was no evidence of any proptosis, but the eye appeared to be pushed to left side. Elevation was restricted and the patient had mechanical ptosis. A repeat scan revealed the same findings, so the patient was posted for re exploration with the doubt of a retained foreign body in the mind.

CLINICAL DIAGNOSIS

Intraorbital Foreign Body.

PATHOLOGICAL DISCUSSION

Plain x-ray did not show any abnormality and the CT scan showed soft tissue swelling in periorbital outline anterior and medial aspect of LE with pocket of air within soft tissue lesion with doubtful radiolucent FB.

Intraorbital foreign bodies can present with confusing atypical clinical picture[1] and are known for remaining quiet and have resulted in damage to the function and structure of the eye and contents of the orbit.[2] They may give rise to cellulitis, abscess, fistulas, and impaired vision and motility. CT scans do provide a good evaluation of the soft tissues in the orbit[3] but an intraorbital FB can often missed or misdiagnosed due to invisible or unclear images[4] despite modern imaging methods. Management and prognosis depend on location, complications and secondary infections. Clinical suspicion, skill and experience of the surgeon can prevent further complications.[2] These injuries can be sight threatening or even life threatening if not managed properly.

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DISCUSSION OF MANAGEMENT

Systemic IV antibiotics were started. The wound was explored extensively and a wooden foreign body about 2.2 cms. long was removed deep from the intraorbital space. The sinus was drained, and pus sent for culture sensitivity. The wound debridement was done. Patient was discharged with antibiotics. The wound had healed well during his first postop visit, later lost to follow up.

The orbit diseases often present a challenging diagnostic features and can cause embarrassment to the ophthalmic surgeon even with the advent of modern diagnostic techniques.[5] Wooden foreign bodies do remain silent for a long time, and may present only as a complication.[6] Trauma, discharging sinus[1] persistent signs of inflammation, limited eye movements, difficult healing[2] should give a suspicion of a retained foreign body. The rapid onset of inflammation can be due to the bacterial flora on the foreign body.[5] Initial radiographic readings can miss or may be inconclusive in detecting foreign bodies.[2,7] However its shape, location, and the use of quantitative CT scan helps in distinguishing a retained wood foreign body from other low-density signals of fat or air.[8] MRI scan should be a better guide to demonstrate wooden foreign bodies. There are cases in which the usual diagnostic modalities did not pick up the intra orbital foreign body, which could have been masked by surrounding reaction or blood.[7,9,10] Cases where there was spontaneous extrusion of the foreign body after many years has also been reported.[1]

A patient with incomplete and slow recovery of the wound despite appropriate treatment should be a clue to a retained foreign body regardless of the time gap between the trauma and presentation specially when infected. Timely intervention is required as it has devastating consequences to ocular motility, vision, and cosmesis.

FINAL DIAGNOSIS

Intraorbital Foreign Body.

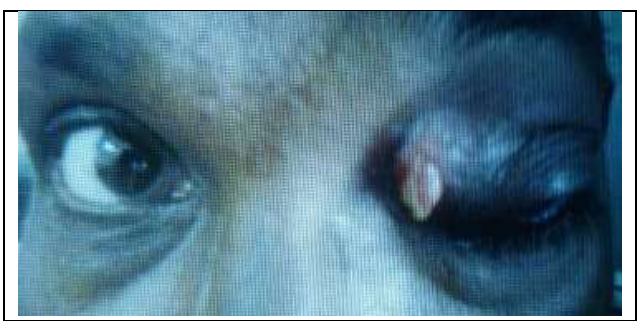

Figure 1. Discharging Sinus in the Left Upper Lid (Original)

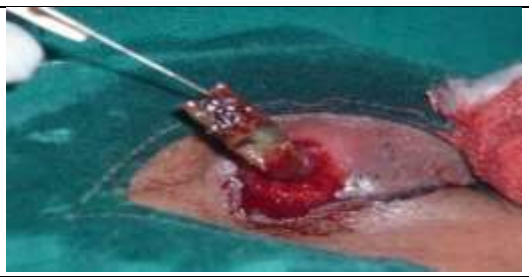

Figure 2. Intraorbital Wooden Foreign Body Removed after Exploration (Original)

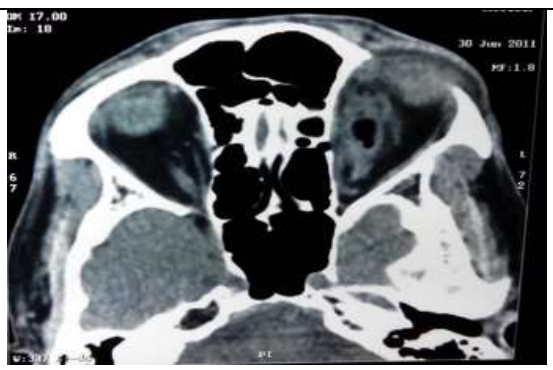

Figure 3. CT Scan Showing Soft Tissue Swelling with Pocket of Air Within Soft Tissue Lesion with Doubtful Radiolucent FB (Original)

Figure 4: The Wooden Intraorbital Foreign Body (Original)

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