



A CHRONIC DISCHARGING GRANULOMA DUE TO MISSED INTRA ORBITAL WOODEN FOREIGN BODY.

Ophthalmology

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ABSTRACT

A interesting case of post traumatic non healing sutured contused lacerated wound (CLW) with normal CT scan which on exploration showed orbital wooden foreign body. A 26 year old female with history of trauma to lid by tree branch had CLW sutured elsewhere 6 months back. Patient had persistent pus drainage for which antibiotics were given multiple times. Patient came to ER and was diagnosed as pyogenic stitch granuloma. Pus was sent for culture and sensitivity and antibiotics was started. CT orbit was done which did not reveal orbital foreign body. Patient underwent orbital exploration for recurrent granuloma which revealed wooden foreign body and upon extraction symptoms were relieved.

KEYWORDS

Intra Orbital Wooden Foreign Body, Contused Lacerated Wound, Granuloma.

Case Report :

A 26 year old female came with chief complaints of mass over right eyebrow since 6 months which was painless, non progressive , peanut sized associated with episodes of pus discharge.

There was history of blunt trauma to right eyebrow by tree branch while riding motorcycle 7 months back for which contused lacerated wound (CLW) suturing was done in peripheral hospital. 2 months later, patient developed purulent discharge from the wound which resolved with oral antibiotics.

Patient has recurrent episodes of purulent discharge and patient underwent excision and drainage in private hospital for the same. HPE report suggestive of pyogenic granulation tissue. Symptoms were temporarily relieved only to re-appear again.

On examination, 3mm × 3 mm mass just below the junction of medial 1/3 rd and lateral 2/3 rd of upper eyelid, non tender, firm in consistency, freely mobile with suture marks present above it and Superior orbital margin palpable. CT Scan Orbit with contrast was planned which showed ill defined enhancing soft tissue lesion with foci of calcification seen along medial aspect of right supra-orbital ridge with minimal extension into superomedial extraconal compartment suggestive of : Granuloma along right supra-orbital ridge without intraconal extension of the lesion.

Patient was diagnosed as right upper eyelid chronically inflamed pyogenic stitch granuloma. Patient was started on oral steroids under the cover of antibiotics followed by tapering of steroids. After 3 weeks, the inflammation subsided and the swelling decreased in size. Patient did not had recurrences for 1 month.

In view of persistence of the mass , orbital exploration was planned. On orbital exploration , multiple pieces of intra orbital wooden foreign body was found. Symptoms resolved dramatically after removal of the foreign body.



Image 1: Right upper eyelid showing chronic discharging granuloma.



Image 2: CT scan orbit with contrast showing granuloma along right supraorbital ridge.



Image 3: multiple fragments of wooden foreign body removed.

DISCUSSION:

Ocular trauma is one of the major causes of blindness worldwide, and around 16% of ocular trauma is associated with foreign bodies (FB)^[1] (Nasr et al).

Intraorbital foreign bodies (IOFBs) usually result from high-velocity trauma to the orbit but may also be found after relatively trivial trauma. IOFBs can be 1] Metallic 2] Non metallic or 3] Organic in nature. Intraorbital wooden foreign bodies (IOWFBs) are relatively rare.

The diagnosis of IOWFBs is sometimes difficult due to insufficient information regarding history of trauma, as well as the insufficiency in the external signs. There can be varied presentation of IOWFBs ranging from periorbital redness and swelling, chronic discharging sinus, conjunctival congestion and chemosis, orbital cellulitis, ptosis, exophthalmos,, extraocular movement damage to vision loss.

Bayramoglu et al study said that although FBs like metal, plastic, and glass are easily detected with conventional radiographs like X-rays, organic FBs like wood is often missed. Therefore, with the feasibility to calculate Hounsfield Units (HU) to differentiated tissues and with

the capacity of the higher geometrical resolution, CT is the gold standard method to detect wooden foreign bodies (WFB) [2]. John et al study showed that the CT appearances seem related to the interval between injury and examination. In the acute stage, the very low density of wood can be confusing with low window settings, mimicking air bubbles. In the subacute stage, wood assumes a moderate density and may be difficult to distinguish from surrounding orbital fat. In the chronic stage, the density of wood can become higher than that of orbital muscle. It may be associated with a foreign-body reaction, which appears as a homogenous mass surrounding the dense wooden foreign body, with a density similar to the adjacent extraocular muscles. [3] MRI often aids in the diagnosis of IOWFB.

Surgery remains the preferred treatment for IOWFBs. Since the wood usually shatters, meticulous exploration needs to continue despite the discovery of a foreign body.

CONCLUSION :

Our case presented with chronic discharging granuloma, not responding to any treatment. Though significant history of trauma by tree branch was present, radiological investigation failed to reveal any wooden foreign body. Thus in orbital trauma, detailed history & thorough examination to find out mechanism and cause of trauma plays a very important role. A high degree of suspicion of retention of orbital foreign body is important in such diagnostic challenges with varied presentations.

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