

Foreign Bodies Invasion in Facial Traumas- A Case Series

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ABSTRACT

Foreign body presence in facial traumas poses challenge and missed in most cases during initial examination. Thorns, hairs, glass particles, pebbles and stones are some of the foreign particles found embedded in soft tissues. Thorough examination and debridement is essential for finding such foreign bodies. This article presents 3 cases of foreign bodies invasion in facial trauma.

Keywords: Foreign body, Trauma, Debridement

INTRODUCTION

In case of soft tissue injury, it is very important to carefully examine the wounds for assessment of any foreign body present, as it can be frequently missed on initial evaluation.

Maxillofacial traumas during road traffic accidents and falls is the major cause for the invasion of foreign body.

Foreign bodies like wooden particles, glass, stones, pebbles, thorns and even hairs may get embedded in soft tissues after facial trauma. [1] Sometimes accidentally it get detected on radiograph, but most of the times patients' are having persisting

symptoms like pain, swelling, tenderness, pus discharge, etc even after antibiotic administration.

Infraorbital granuloma, brain abscess, osteomyelitis, and even death can occur as a late complication of such cases. [2]

In this article, we are presenting 3 cases of retained foreign bodies in facial region after maxillofacial trauma.

Case 1

A 58 year old female reported to the department of dentistry with a sutured inflamed wound in left zygomatic and temporal region (fig.1a). History of fall was present. Wound was tender and continuous blood was oozing through it. Even after administration of antibiotics, inflammation and pus discharge was persisting. No foreign body was revealed on radiographic examination. After cutting the sutures, there was an open unhealed wound. Exploration was done for any foreign body present. 5 hair strands were retrieved from the wound. After confirming complete removal of hair strands, wound was resutured (fig.1b).



Fig.1a Unhealed wound due to hair invasion



Fig.1b Sutured Wound

Case 2

A 50 year old male was referred to our emergency department with a sutured wound in right zygomatic and temporal region. He met a road traffic accident 4 days back. Patient complaints of increase in swelling even after parenteral antibiotic administration. Radiographic findings revealed multiple radiopaque foreign bodies of different sizes. Wound was reopened and explored (fig.2a). 14 pieces of glass particles were retrieved. Wound was resutured after confirming removal of glass pieces (fig. 2b & 2c).



Fig.2a Unhealed wound after suture removal

Fig. 2b Sutured wound after removal of glass pieces

Fig. 2c Glass pieces retrieved from wound

Case 3

A 7 year old male boy reported to our emergency department with abrasion in zygomatic and temporal region with history of fall. Patient complaints of pain and pus discharge. On examination, sinus was present (fig.3). Radiograph revealed presence of radiopaque foreign body. Wound debridement was done and stone piece measuring 4 mm by 5 mm was found. After confirmed removal of foreign body, wound was sutured.



Fig.3 Sinus present due to invasion of stone pieces

DISCUSSION

To diagnose a foreign body presence during initial examination is very difficult.

One third of all foreign bodies are usually missed initially. [3]

Denser materials like metal particle, glass particles, stones, pebbles, grit can be easily detected on radiographs, while thorns and wooden pieces best visualized by computed tomography. [4] Localization of foreign body invasion can also be established using ultra sound imaging. [5]

Mostly foreign bodies carry microorganisms and associated with infection of the wound. [6] Sinus formation, pus discharge, unhealed wound are some of the unwanted consequences of infected foreign bodies.

In our case series, all the patients reported with clinical symptoms of foreign bodies invasion after facial trauma. In two cases radiographic examination confirmed the presence of foreign bodies. As per the findings, whenever there is a doubt radiographs are advisable to rule out foreign bodies.

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