

**Retained Foreign Body in a Case of Penetrating Neck Trauma- A Case Report****Gayathri B<sup>1</sup>, Gowri Sankar M<sup>2\*</sup>, Prakash S<sup>3</sup>, Snigdha E<sup>4</sup>, Sivaraman G<sup>5</sup>**<sup>1,3,4</sup>M.B.B.S, M.S (E.N.T), Junior Resident, Dept. of ENT, JIPMER, Pondicherry, India<sup>2</sup>M.B.B.S, M.S. (E.N.T), Senior Resident, Dept. of ENT, JIPMER, Pondicherry, India<sup>5</sup>M.B.B.S, M.S. (E.N.T), Associate Professor, Dept. of ENT, JIPMER, Pondicherry, India**\*Corresponding author***Gowri Sankar M***Article History***Received: 09.01.2018**Accepted: 20.01.2018**Published: 30.03.2018***DOI:**

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**Abstract:** Facial trauma with retention of foreign material in the wound is of common occurrence. But foreign body impaction secondary to trauma in the neck is rare. Though such cases are common as part of occupational hazards, we rarely come across such cases related to road traffic accidents. Here we present a case report of impacted glass piece in the neck, secondary to a road traffic accident.

**Keywords:** penetrating injury neck, glass piece.

**INTRODUCTION**

Penetrating trauma to the neck is commonly encountered as a part of a suicidal or homicidal attempt or even as a part of occupational hazards. These cases demand a high level of dexterity and index of suspicion in their management because of the complex anatomy of the neck and proximity to vital structures. Coexisting foreign body retention in the neck following road traffic accident is a rare occurrence, and as per our knowledge of literature this appears to be the first case reported so far.

**CASE REPORT**

A 32year old male presented with an alleged history of road traffic accident while he was riding as the 1<sup>st</sup> passenger in car complaining of injury to left face and neck.

On initial examination patient was conscious and oriented, vitals stable. There was no respiratory compromise and the patient had no history of swallowing difficulty or change in voice. Face and neck examination revealed multiple lacerations over the left side of face and neck (fig-1). Initial examination was unremarkable and the plan was to suture the wound primarily after an x ray of the neck and chest. X ray neck showed a radio dense triangular foreign body on the left side of the neck (fig-2). Postxray, history was further elicited from patient as well as the driver of the car regarding the nature of injury, surprisingly both were unaware of any foreign body penetration. Contrast enhanced CT showed an enhancing foreign body which

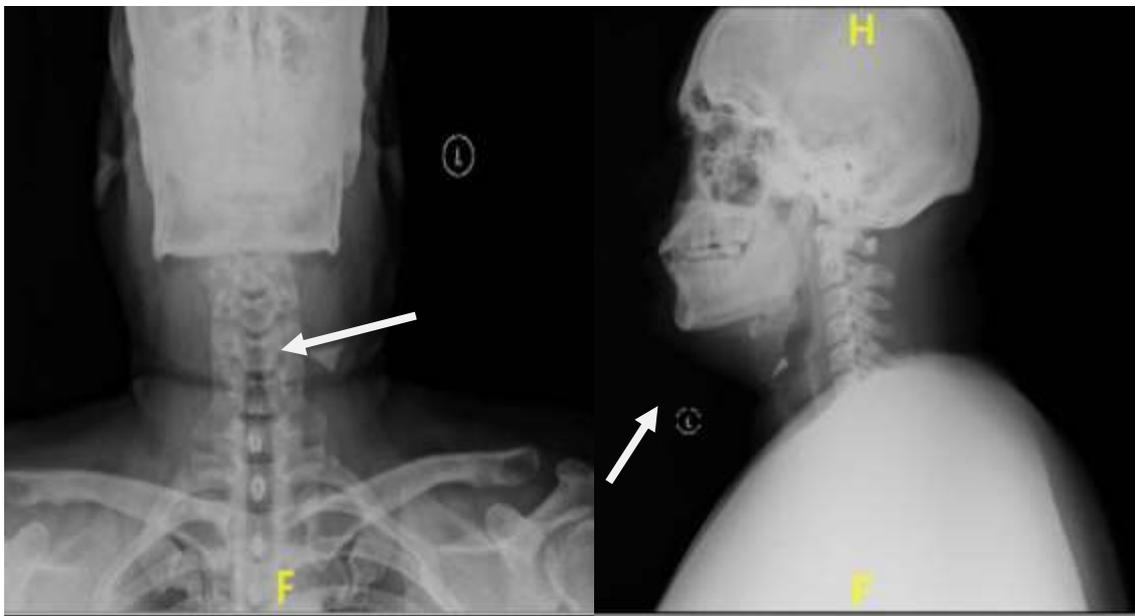
was found to have breached the platysma with no evidence of great vessel or visceral injury (fig-3).

The neck was explored under local anaesthesia, intraoperatively a tinted glass piece measuring around 5cm x 3cm was found beneath the platysma abutting the left lamina of thyroid cartilage with no significant bleeding. After removal of the glass piece, wound was closed in two layers.

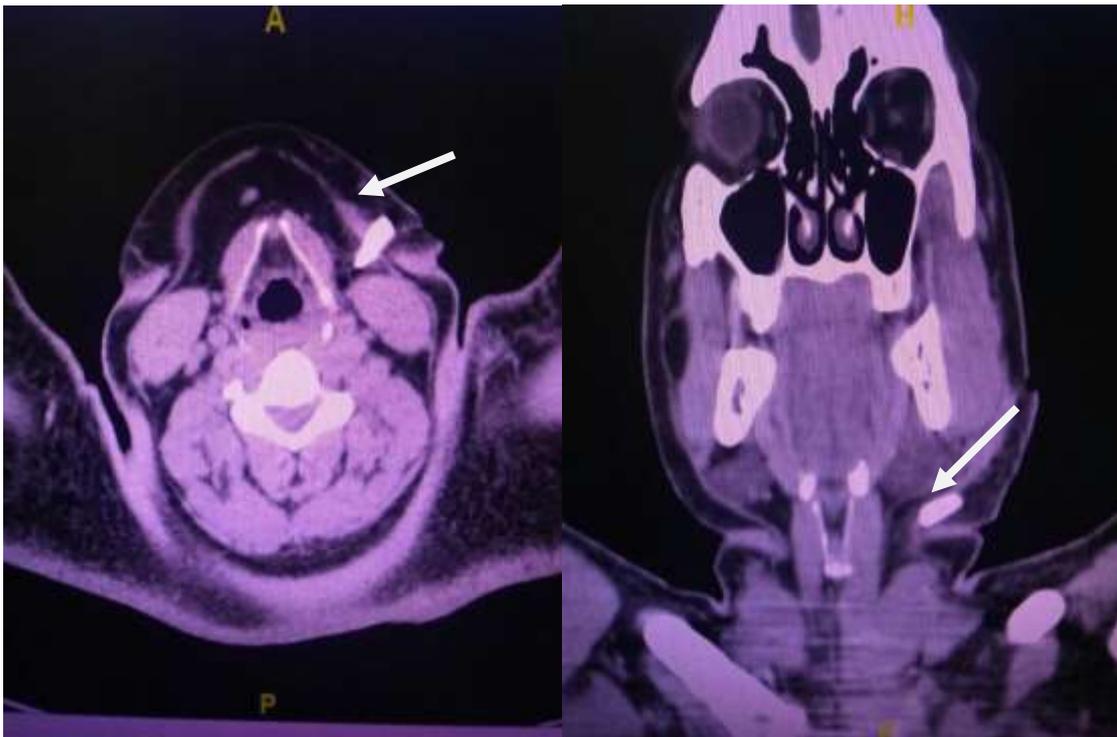
Postoperatively, the patient recovered well without any complications and was discharged on post on day 3 with oral antibiotics.



**Fig-1: showing multiple lacerations on face and neck**



**Fig-2: X ray showing the presence of foreign body (white arrow)**



**Fig-3: CT (axial and coronal views ) showing the presence of foreign body(white arrow)**



**Fig-4: showing the removed foreign body (tinted glass piece)**

### DISCUSSION

The assessment and management of penetrating injury to the neck is complex owing to vital structures in the region. Road traffic accidents resulting in penetrating injuries to face and neck are common, while impacted foreign body in the neck is rare [1]. Trauma to neck is classified by anatomical zone of injury, while our case comes under zone 2 [1]. Zone 2 injury commands mandatory exploration as per East guidelines. Almskog *et al.*, [2] found that neck explorations under local anaesthesia resulted in more hematomas and missed injuries compared with those explored under general anaesthesia.

In this case impacted foreign body was revealed by x ray of the neck, stressing the importance of routine x ray examination. Contrast enhanced CT was done to know the extent of injury and to locate the foreign body and its relation to vital structures in the neck. CT enabled us to confidently explore the neck under local anaesthesia. This highlights the importance of radiologic investigations in injury to the neck.

The decision to explore the neck stays the standard management in case of penetrating injuries, but may also result in a significant number of negative explorations [3].

Luo *et al.*, [4], George *et al.*, [5] Dubois *et al.*, [6] reported cases of penetrating injury in which the initial examination was unremarkable, the wound was sutured, but later on the patient presented with complications.

Hence this case report enlightens how radiologic investigations aided in management of the patient.

## CONCLUSION

Impacted foreign bodies in penetrating injury to the neck secondary to road traffic accidents are rare. We conclude that a CT is to be done in all cases of penetrating injury to the neck followed by the decision to explore the neck. A computed tomography of the neck helps in picking up vessel and visceral injury and serves as a roadmap for exploration.

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