



AN UNUSUAL CASE OF PENETRATING FACIAL TRAUMA

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ABSTRACT

Penetrating injury to the face with a fishing harpoon is a rare occurrence. Surgeons need to have a clear idea of anatomy, tract of penetration and knowledge regarding the tip and shaft of the harpoon to safely remove the metallic foreign body. This paper describes a case of a 8 spiked metallic fishing harpoon homicidal injury to the face in a 49 year old man and its surgical removal at a tertiary care facility. Computed Tomography (CT) scan was done to visualise the path and character of tip and shaft of the offending weapon. Surgical exploration was done to remove the metallic foreign bodies. Preoperative imaging and proper planning is necessary for successful removal of such foreign bodies.

KEYWORDS

Fishing Harpoon; Facial injury; Penetrating injury

INTRODUCTION

Patients with penetrating injury to the face with a fish catching metallic harpoon is a rare entity in day to day practice of an otolaryngologist and head neck surgeon. Very few cases have been reported in literature.^{1,2} Harpoons have barbed tips which aid in greater penetration into tissues and thus may cause greater damage if removed inadvertently. Surgeons need to have a clear idea of anatomy, tract of penetration and knowledge regarding the tip and shaft of the harpoon to safely remove the metallic foreign body. This paper describes a case of a 8 spiked metallic fishing harpoon homicidal injury to the face in a 49 year old man and its surgical removal at a tertiary care facility.

CASE STUDY

A 49 year old man presented to the emergency room, with an alleged homicidal injury to the face with an 8 spiked metallic fishing harpoon with the offending weapon in situ (Figure 1).



Figure 1

It was found that 2 out of the 8 spikes had penetrated the left side of the face through and through, nearly missing the nose and the oral cavity (Figure 2). The remaining of the 6 spikes of the harpoon which had not penetrated the face were removed using grill cutter to get better visualization and access to the area of interest. The 2 entry wounds were: 1) Below left malar prominence 5cms away from left nasal alae. 2) Below lower lip about 2cm left of midline just missing mouth (Figure 2). The 2 points of exit of the spikes : 1) Left ear lobule superficial to the mastoid tip with no evidence of any bleeding and underlying haematoma. 2) Over the angle and body of the left side of mandible superficial to the bone (Figure 3). There was no evidence of any facial weakness on the left side.



Figure 2



Figure 3

After necessary resuscitation, a Computed Tomography (CT) scan was done and it revealed, upper spike just missed the maxilla, ramus of the mandible, away from the internal carotid artery and passing through the parotid gland and lower spike just grazed past the body of the mandible (Figure 4 & 5). No barbs were present along the shaft of the spikes except at the tips.

Surgical intervention was started with a tracheostomy as the spikes were posing difficulty in positioning the patient for intubation. Exploration from the entry wound along the path of the metallic foreign bodies was done under general anaesthesia. One spike was found passing through the superficial lobe of the left parotid gland damaging part of the superficial lobe of the left parotid gland with no visible injury to the facial nerve. The other spike grazed past the left side of the mandible only injuring the soft tissues along the path of the trajectory without injuring the facial vessels. The 2 metallic spikes were subsequently removed. Wound closed in layers after thorough irrigation with Normal Saline, Povidone Iodine solution and placement of rubber drains. Tetanus prophylaxis was administered. Post-operative period was uneventful and the patient was decannulated within one week of the surgery and drain was removed after 2 days. The patient was discharged on the 8th post-operative day. There was no evidence of any post-operative facial weakness and infection (Figure 6).



Figure 4

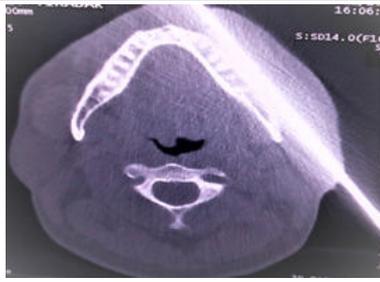


Figure 5



Figure 6

DISCUSSION

Although the incidence of facial injury with a metallic weapon is common, but injury with a 8-spiked harpoon is indeed uncommon. The approach for removing such foreign bodies is personalized for each case³. Among some principles suggested, any attempt to force the object out must be discouraged, since it will fatally be unsuccessful³. CT scan is an essential investigation for identification of the location and nature of the tip and shaft of the offending weapon⁴. The main surgical access done in this case was thorough exploration of the tract of injury of the metallic spikes to rule out any injury to vital structures and any source of bleeding within the tract. The metallic foreign bodies were removed only after exploration of the entire tract of penetration from base to the tip.

CONCLUSIONS

Though the incidence of penetrating injury to the face with a fishing metallic harpoon is rare but a surgeon must have ideas regarding the basic principles in managing such an injury like tip of the spike, presence or absence of barbs along the shaft, trajectory of the path and its associated anatomy and exploration of the entire tract before removal of the foreign body.

REFERENCES:

1. Hefer T, Joachims HZ, Loberman Z, Gdal-On M, Progas Y. [Facial injury by fishing harpoons]. *Harefuah*. 1994 Nov 1;127(9):295-8, 360.
2. Ribeiro AL, de Vasconcellos HG, Pinheiro Jde J. Unusual fishing harpoon injury of the maxillofacial region in a child. *Oral Maxillofac Surg*. 2009 Dec;13(4):243-6.
3. Alper M, Totan S, Cankayali R, Songür E. Maxillofacial spear gun accident: report of two cases. *J Oral Maxillofac Surg*. 1997 Jan;55(1):94-7.
4. Hefer T, Joachims HZ, Loberman Z, Gdal-On M, Progas Y. Craniofacial speargun injury. *Otolaryngol Head Neck Surg*. 1996 Dec;115(6):553-5.