

Stab wound in the facial region (Jael's Syndrome), case report

Abstract

Described by Jefferson in 1968, Jael's syndrome is described as an intentional injury caused by a knife in the skull or face. The clinical and radiographic diagnosis is essential to know the risk of damage to the anatomical structures and the location of the foreign body, treatment includes removal, wound examination, suture, tetanus immunization and antibiotic prescription. This article describes the clinical case of a male patient with knife wound with a foreign blade in the buccal, masseter and mastoid region and its surgical treatment.

Keywords: a knife wound, facial region, Jael's syndromes

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Introduction

There exist only a few cases reports in the literature about stab wound in the face with the presence of the blade included.¹ Most of them were completed after an assault, street fight or work accident; the blade goes through the soft tissue producing damage to anatomic and vascular structures.^{2,3} The Jael syndrome has been used in the medical literature previously, based on the biblical passage about the murder of Sisera by Jael (Judah IV:21). The treatment is multidisciplinary, initially to secure the airway, complete the hemodynamic stabilization, neurologic, ophthalmologic and vascular evaluation.⁴ The imaging studies are fundamental to evaluate the location of the blade, direction, and relationship with adjacent anatomic and vascular structures, important in the area involved.^{2,4}

Case Report

A male patient of 58 years old come to the emergency room after being attacked by other persons with a knife in the facial region. A physical exam shows a Glasgow of 15 points, with a cutting wound in the right side of the mouth, with oral opening limitation, pain in 6 of 10 points in VAE. Lateral and posterior-anterior x-rays were

performed, showing the knife blade in horizontal position with an anterior-posterior direction and related with soft tissue located in the ascending mandibular branch in the right side to the cervical posterolateral región and adjacent to the mastoid process (Figure 1).



Figures 1 Lateral and posterolateral radiograph of the skull where the knife blade can be located.

A CT scan was performed with 3D reconstruction and vascular CT scan to locate the foreign body with respect to vascular structures (Figure 2).

The patient was moved to the operating room to complete the removal of knife blade under general anesthesia. Using the same



Figure 2 3D reconstruction of CT scan where the position, direction, and relation with other anatomic structures were established.



Figure 4 Foreign body compared with a scalpel #15.

Discussion

According to Nogueira de Barros et al., the indications for removal of a foreign body in the facial region are that it is of organic origin, is freely palpated, is anterior to the orbit, have high toxicity, is in an intraarticular position, the presence of infection or limit the function. Within the contraindications for removal reports the inorganic origin, location posterior to the orbit, proximal to vital structures, the absence of imaging studies, the risk of iatrogenic damage, the absence of symptoms or not precisely location.³

Shinohara recommends that the management of these cases with wounds with foreign bodies inside should be with an access, removal of the foreign body, wound exploration, irrigation and suture, all this plus tetanic immunization and broad spectrum antibiotics.⁵

Conclusion

The stab wound in the facial region with the presence of the foreign body is a rare case with only a few reports in the literature.^{4,7}

The lesions caused with sharp objects need a special attention,

wound as the point of approach, and with previous confirmation of no affection to vascular vital structures, the knife blade was retracted without major bleeding, the wound washed and closed with polyglycolic acid in deep planes and nylon in the skin, without incidents or accidents (Figures 3) (Figures 4).

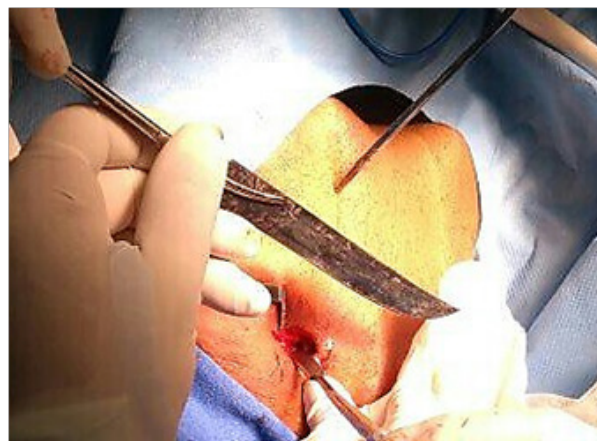


Figure 3 Clinical photograph of the surgical field and the removed foreign body.

by the need of imaging studies with the 3D reconstruction of soft and hard tissues in the diagnosis. For all the lesions in the facial region a vascular CT scan, carefully physical exploration and careful management of anatomic structures, especially the airway, nerves, arteries, and veins are needed. The present case included antibiotics therapy with Amoxicillin with clavulanic acid, anti-tetanus vaccination and close control of the wound.

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None.

Conflict of interest

Author declares no conflict of interests.

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