Foreign Body in Sacral Region: Remaining Part of Knife After Stabbing

Sakrumda Yabancı Cisim: Bıçaklanma Sonrası Geride Kalan Bıçak Parçası

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ABSTRACT

Residual foreign bodies may be seen after penetrating injuries, accidents, or medical procedures. The head and neck are the most common sites of residual foreign bodies. Computed tomography is the best diagnostic modality for determining their shape, exact location, and relationship to adjacent tissues. Treatment consists of removing the foreign body if possible. We present a case of residual foreign body at the sacrum after stabbing.

Keywords: Foreign body, sacrum, stabbing

ÖZ


Anahtar Kelimeler: Yabancı cisim, sakrum, biçaklanma

Introduction

Remaining foreign bodies such as bullet, shrapnel, needle, wood, metallic pieces and medical materials (sponge, surgical or diagnosing instruments etc.) could be seen after stabbing, firearm or blast injuries, accidental or suicidal attempt or medical procedures. These remaining foreign bodies are presented at head, neck, torax, abdomen, buttock and extremities or multiple locations. Remaining foreign body after stabbing especially at sacrum is a very rare condition. Foreign body can be seen at plain radiography but computed tomography (CT) is the most suitable diagnostic modality. Remaining foreign body can be removed if it is applicable. Here we present a case of remaining foreign body at sacrum after stabbing.

Case Report

Twenty-one years old man with history of stabbing from sacral region six month before and remaining part of knife was applied to general surgery service with lumbosacral pain. There is an incision scar at gluteal region and pain in palpation at physical examination. Bright, smooth edged foreign body seen at lumbosacral plain graphy (Figure 1). Smooth edged, sharp, metallic foreign body image that terminal of it stuck in S2 vertebral spinous process but not damage spinal cord was seen at CT (Figure 2). After neccesary operative preperation under local anesthesia and sedation with consultation of neurosurgery foreign body was removed (Figure 3). No complication was seen after operation and control evaluations

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in postoperative neurological and surgical follow up at the two years were normal.

**Discussion**

Penetrating injuries of buttock are important injuries and 2-3% of the penetrating injuries. These injuries are life-threatening conditions, and about one quarter of these injuries may occur neural, visceral and vascular injuries. It has been reported that total mortality rate of penetrating injuries of buttock 2.9%, stabbing injury mortality rate 3.8% and gunshot injury mortality rate 2.6% in literature.\(^1,2\) In our case, there is no neurologic, vascular or visceral injuries but only stuck in S2 vertebral spinous.

Remaining foreign bodies after penetrating injuries occur by firearm, blastic and stab injuries or accidents. Head and neck such as ear, eye, nose and pharynx are the most common site of remaining foreign body after penetrating injuries. Gunshot pellets could remain at torax, abdomen and extremities.\(^3,4,5\) Remaining foreign body after stabbing is a very rare condition. Our case has an sacral operation history after stabbing but a part of knife remained at sacrum. Diagnosing the remaining foreign body can change according to foreign body feature. Although metallic foreign bodies can be seen at plain radiographies but it is very difficult to determine the exact location and the relationship of foreign body with vascular, visceral and neural structures. CT is the most appropriate diagnostic method because of determination the exact location and the relationship of foreign body with vascular, visceral and neural structures.\(^6,7\) In our case, at plain graphy a bright smooth edged foreign body was seen but exact location and relationship of foreign body with vascular, visceral and neural structures could be evaluated by CT.

The mainstay of treatment is removing the foreign body as possible to remove without further complications. Vascular, visceral and neurologic statements must be evaluated carefully and consulted with cardiovascular surgeon or neurosurgeon pre or peroperatively.\(^8,9\) In our case, according to CT image we consulted with neurosurgeon

![Image 1. Image of lumbosacral plain graphy](image1.png)

![Image 2. Image of computed tomography a) Horizontal section image, b) 3D image reconstruction of sacrum](image2.png)
pre and peroperatively. There is an ossesos pathology on S2 vertebra and spinal cord was intact.

As a conclusion; penetrating injuries of sacrum is important and sometimes life-threatening injuries. CT is appropriate diagnosing modality for injuries or remaining foreign bodies due to increased risk of vascular, visceral and neural injuries. Preoperative and peroperative neccessary consultation will reduce the morbidity and mortality rates.

**Ethics**

**Informed Consent:** Consent form was filled out by participant.

**Peer-review:** Externally peer-reviewed.

**Authorship Contributions**


**Conflict of Interest:** No conflict of interest was declared by the authors.

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**References**