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CASE REPORT

A rare case of retained, asymptomatic bullet in para spinal space due to homicidal injury by country made weapon

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Abstract Gun shot wounds are commonly fatal and among them thoracoabdominal and spinal injuries are significantly hazardous. Usually firearm injuries produce a characteristic pattern with peculiar features, rarely we encounter some very unusual and unique presentation, which requires a lot of skill and competence to handle and may create surgical or medico-legal diagnostic problems. Here we present a case of a 58 years old person, who presented with low-velocity gunshot injury in his chest at the right 3rd intercostals space and the bullet after traveling a long course inside the body, finally lodged anterior to the spine at the level L2–L3 near the great vessels. But surprisingly it did not produce any significant injury and the patient was asymptomatic. He was managed conservatively, and is having no problem on regular follow ups till date.

1. Introduction

Thoracic and thoracoabdominal penetrating wounds are very frequently encountered in any medical/trauma center. The incidences of violent crimes with gunshot injuries have become increasingly more common. In a US study including 3049 patients treated at a trauma center, there were 1347 stab wounds and 1702 gunshot wounds. Thoracoabdominal injuries were present in nearly 39% cases of firearm injuries and this clearly signifies the contribution of firearm-related injuries.[1]

India's rates of violence vary greatly and in a majority of firearm related injuries illegal, unlicensed weapons are used. As in 2006, India was home to roughly 40 million civilian firearms, out of an estimated 650 million civilian owned guns then believed to exist worldwide.[2] But only 6.3 million (just over 15%) are licensed.[3] These estimates convey a sense of relative scale between legal, illegal, and overall Indian civilian gun ownership. Unlicensed weapons are not only the most

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common, but also appear to be the most lethal, both overall and individually. These illegal and unlicensed firearm weapons account for 86–92% of reported firearm- related murders, depending on the year. They are the logical target for more aggressive efforts to reduce firearm-related death and injury.

Firearm injuries are invariably associated with a high degree of mortality and morbidity; rarely they remain asymptomatic or give delayed manifestation. Such a case of firearm injury without any remarkable expression is an extremely rare event, which has occurred to our patient.

In this case homicidal firearm injury was caused by a low velocity country made riffled weapon. The bullet followed an unusual trajectory, but amazingly with minimal residual injury. It perforated the anterior chest wall and traveled through the diaphragm and the abdomen till it impacted on the spine at the level of L2–L3.

2. Case report

An elderly farmer of about 60 years was brought to the causality with alleged history of homicidal firearm injury following a quarrel, inflicted by country made riffled weapon. He bowed down to escape the fire but it all went in vain, he injured and fell down. After transient unconsciousness for 1–2 min, he recovered with out any problem except for the pain at the site of injury. He was admitted after about 1 h. On examination, one bleeding lacerated wound 1×3 cm (the entry wound) was found in the right third intercostals space (ICS) just anterior to the anterior axillary line (Fig. 1). It was accompanied by a few more lacerations and radiating linear injuries from above downwards along with traces of unburnt gunpowder which was later on matched with that on the alleged weapon. But even on a detailed clinical examination an exit wound could not be traced. The patient was conscious, well oriented with stable vitals; Pulse 90/min, BP-130/82 mmHg, RR-24/min and no pallor. Chest examination revealed bilateral equal air entry, abdominal examination was normal with normal bowel sounds and without any guarding or tenderness. His neurological and other systemic examinations were also within normal limits; the patient was subjected to a detailed radiological screening to locate the bullet and to assess the extent of injury. Radiography of the chest was normal and there was no hemothorax or pneumothorax. Abdominal X-ray revealed a radio opaque shadow at the level of L2–3 and anterior and lateral view (Figs. 2 and 3) showed that the bullet was lodged anterior to the spine at the level of L2–L3 without causing any vertebral or spinal injury. There was no focal neurological deficit. The ultrasound and contrast enhanced computed tomography of abdomen were done to rule out any intra-thoracic or intra-abdominal injury as multiple organ injuries were suspected as the bullet had traveled from the thorax through the diaphragm and the whole of the upper abdomen to get lodged anterior to the spine near the great vessels but to a great sur-

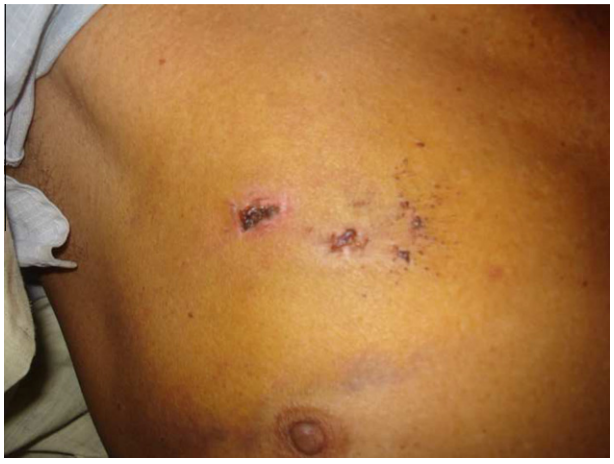

Figure 1 Clinical photograph showing entry wound site on the right chest.

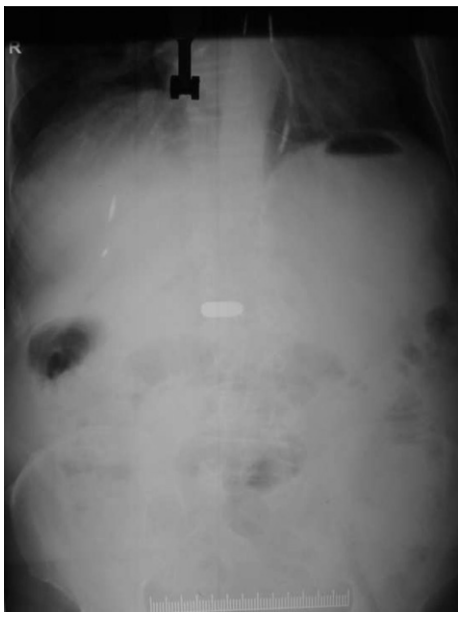

Figure 2 Radiograph (AP view) showing bullet at the level of L2–L3.

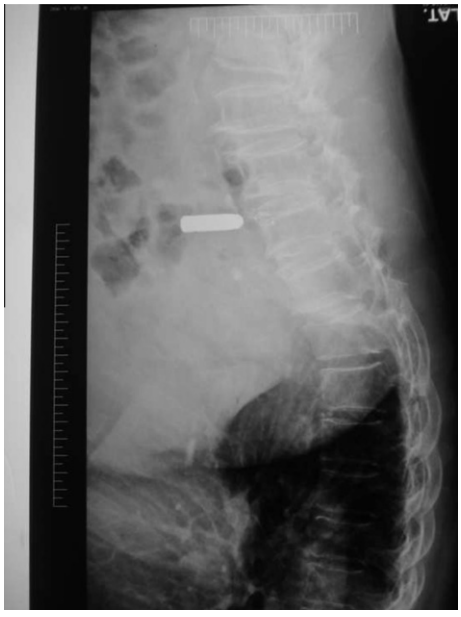

Figure 3 Radiograph (Lat. view) showing bullet at the level of L2–L3.