

TOPIC : A MAN WITH MULTIPLE SHOTGUN INJURIES: SHOULD ALL THE BULLETS BE REMOVED?

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Introduction

The extent of injuries caused by gunshots to the abdomen can vary, ranging from minor wounds to extremely traumatic ones, depending on which anatomical structures the bullet penetrates. Should a man with multiple shotgun wounds be explored? If so, should all the bullets be removed?

Conclusion

The successful recovery of the patient following timely laparotomy and removal of bullets illustrates the effectiveness of prompt surgical management in trauma care. This case highlights the importance of early intervention to reduce morbidity and prevent complications in patients with multiple gunshot injuries.

Case Presentation

A 30-year-old man with alleged multiple gunshot wounds after a friend accidentally shot him, mistaking him for a deer.

At arrival, the patient had a fluctuating Glasgow Coma Scale (GCS) of 14/15 and appeared confused. Although blood pressure was within the normotensive range, the heart rate was tachycardic.

Clinically, numerous gunshot wounds were visible across the body, over the neck, chest, abdomen, and upper limbs. CT findings showed numerous bullets in the intraperitoneal and retroperitoneal regions and solid organs such as the liver and pancreas.

A decision was made for exploratory laparotomy, repair of the bowel injury, and removal of the visible bullet found in the naked eye. During the laparotomy, multiple small bowel serosal tears and a through-and-through bowel perforation were discovered, all of which were subsequently repaired through primary closure. During the laparotomy, four metal bullets were found and subsequently removed. Following the surgery, the patient was discharged home in good condition after one week.

Discussion

This case demonstrates the management of alleged multiple shotgun injuries. A dilemma arises in cases of multiple gunshots with vague clinical findings: whether to perform an exploratory procedure. The decision must weigh the potential benefits of identifying and addressing hidden injuries against the risks of causing additional tissue damage and complications from unnecessary surgery.

The literature on gunshot wound treatment states that any patient with abdominal gunshot wounds exhibiting active bleeding, peritoneal haemorrhage, peritonitis, or worsening clinical symptoms must have a laparotomy performed immediately for diagnostic and therapeutic purposes.¹

According to other literature, formal surgical debridement is advised when the gastrointestinal system is involved and should start within 6 to 8 hours after the injury.² On the other hand, complications may arise from postponing the exploration and treatment of an intra-abdominal injury.

Following a nonfatal gunshot wound, in the minority of cases, bullets are removed just during their initial admission, and only a tiny portion of these are extracted when complications appear.³

Otherwise, according to other literature, some gunshot wounds over the abdomen can be treated without surgery.⁴ However, be aware that potential complications from retained bullets include sepsis, infection, spontaneous migration, and lead toxicity.²

References

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Figure 1: Multiple gunshot wound over the abdomen



Figure 2: Xray shows bullets all over chest and abdomen

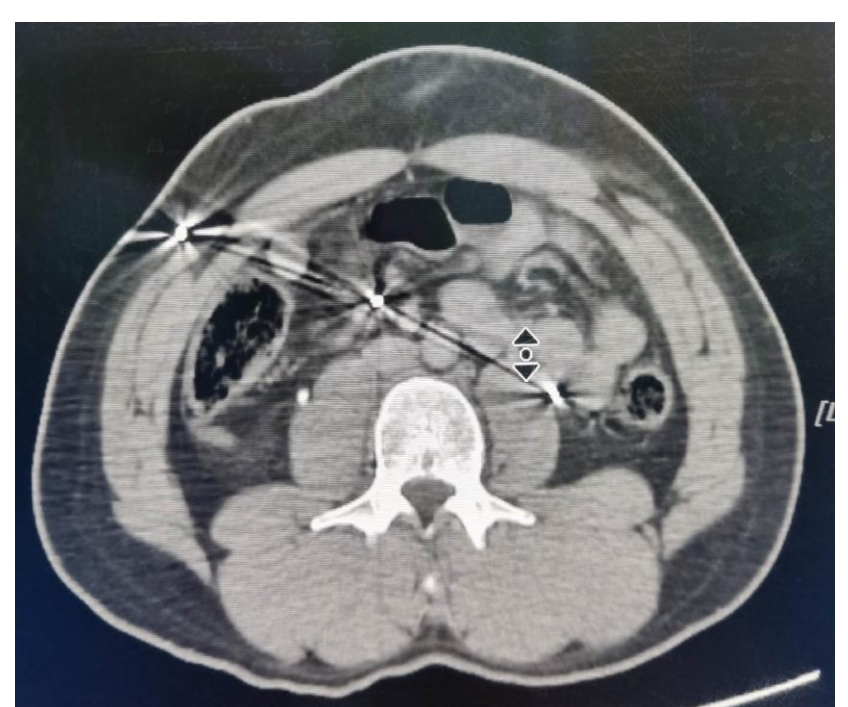


Figure 3: Bullets intraperitoneal



Figure 4: Arrow shows serosa tear of small bowel