Thoracoabdominal Penetrating Trauma from an Impaled Metallic Pipe: A Case Report

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INTRODUCTION

Thoracoabdominal penetrating injuries with a foreign body exiting to the other side are extremely rare, carry high morbidity and mortality. We encountered a case of thoracoabdominal penetrating injury with a long metallic pipe.

AIM

To present the management and outcome of a thoracoabdominal impalement from a metallic pipe.

METHODS AND MATERIALS

- 24-year-old male, fall onto scaffolding pipe.
- ABCDE: talkative, hemodynamically normal, equal breath sounds.
- eFAST and chest/pelvis X-rays: negative.

IMAGING & INJURIES

CT: bilateral pneumothorax, subcutaneous emphysema, pneumomediastinum.
Rib fractures: right 8th, 10–12th, left 8th.

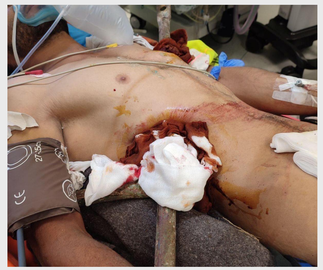

Figure 1. Real time image showing penetrating Thoracoabdominal trauma with metallic pipe as a result of fall injury.

Figure 3. Intraoperative images showing the metallic pipe exiting from the left thoracic cage.

OPERATIVE MANAGEMENT

- Immediate OR per ATLS priorities.
- Exploratory laparotomy & left thoracotomy: no visceral/major vascular injury.
- Controlled extraction of metallic stake under direct vision.
- Prophylactic bilateral chest tubes placed.

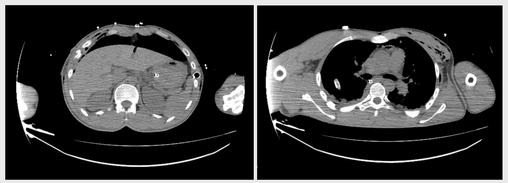

Figure 2. CT scan showing rib fractures with no extensive lung contusions.

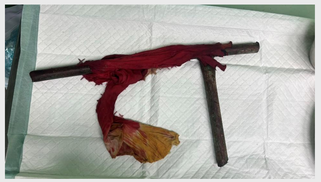

Figure 4. Foreign object (metallic pipe) removed.

HOSPITAL COURSE

Day 0: Admission → OR (laparotomy + left thoracotomy) → Stake removal → Chest tubes.

Early Post-op: CT confirms bilateral PTX, pneumomediastinum; analgesia, respiratory care.

Complications: Pneumonia & loculated (cystic) effusion → Image-guided drainage + antibiotics.

Outcome: Clinical improvement; discharge on postoperative day 40.

CONCLUSIONS

Initial management of the patient with an impaled object should follow ATLS principles. In a resource-limited setting, plain X-rays are valuable in surgery planning. Retained foreign bodies, especially those with sharp tips or edges, have to be dissected and removed with extra caution and meticulousness by a trauma surgeon in a controlled setting.

CONTACT

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