

Clinical Image

Penetrating Thoracic Trauma: Computed Tomography Depiction of a Bullet Path

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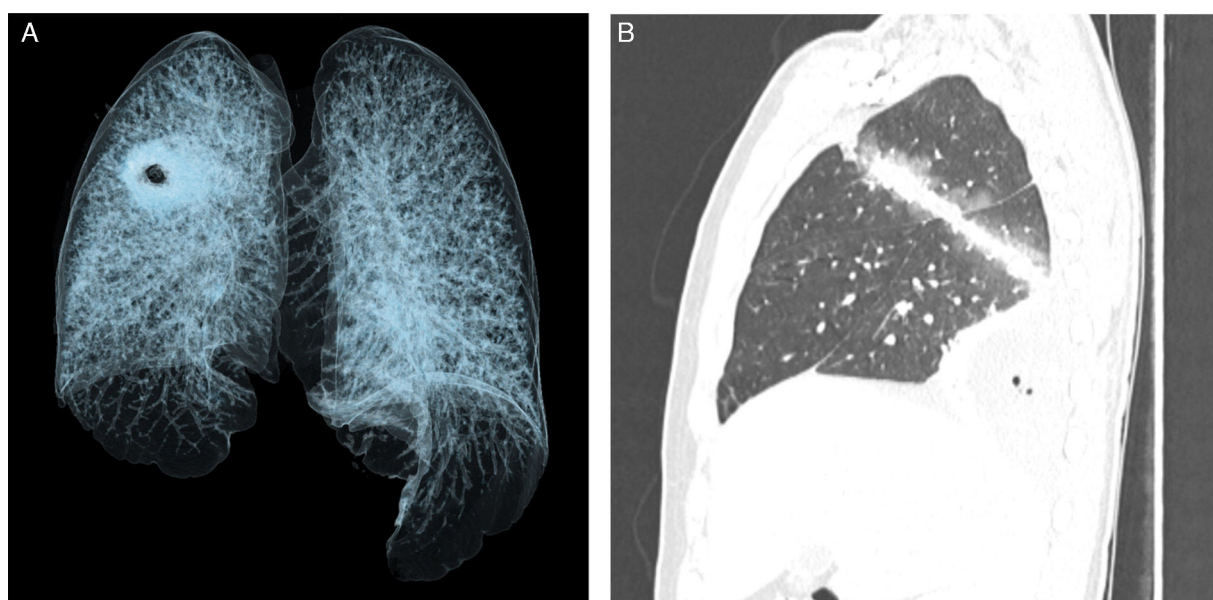


Fig. 1. (A) The image shows a 3D reconstruction of a coronal chest CT scan showing the bullet entry wound. (B) The image shows a sagittal CT scan of the chest, revealing an oblique trajectory of the projectile from the anterior segment of the upper lobe to the apical segment of the lower right lobe, associated with moderate haemopneumothorax.

Firearm-related thoracic trauma is infrequent in southeast Spain but carries high risk due to the proximity of vital structures. In hemodynamically stable patients, chest computed tomography (CT) is the diagnostic modality of choice, enabling precise assessment of the projectile trajectory, associated injuries, and complications. We report the case of a 17-year-old male with a gunshot wound to the right hemithorax. The entry site was located in the infraclavicular region and the exit wound in the ninth right intercostal space along the paravertebral line (Fig. 1A). On admission, he was conscious, mildly dyspneic (SpO₂ 98%), and stable. CT demonstrated an oblique bullet trajectory from the anterior segment of the right upper lobe to the apical segment of the lower lobe, associated with a second rib fracture, pulmonary contusion, and moderate hemopneumothorax (Fig. 1B). A 20Fr chest tube drained 300 cc of blood initially, totaling 2000 cc in 24 h. Despite this, the patient remained stable and was managed conservatively with drainage, multimodal analgesia, antibiotics, and Intensive Care Unit monitoring. His course was favourable, and he was discharged after ten days. This case highlights the value of CT in guiding management [1,2] and supports conservative treatment in selected stable patients without vascular injury [3,4]. Surgery should be reserved for massive haemothorax, vascular injury, or clinical deterioration [5]. Here, although surgery was an option, the patient's stable status and good response justified conservative therapy. Early multidisciplinary assessment remains essential for optimal prognosis.

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Contribution of each author

- MMG: Literature review, Drafting the manuscript and Manuscript writing.
- JSM: Literature review and Manuscript writing.
- FMGV: Literature review, Manuscript writing and Manuscript revision.

Artificial intelligence involvement

Artificial intelligence was used exclusively for linguistic enhancement. All scientific content and writing are the sole work of the author.

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Conflicts of interest

No conflicts of interest have been identified in relation to the case presented.

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