

Images in medicine

Massive subcutaneous emphysema after blunt chest injury

Enfisema subcutáneo masivo secundario a traumatismo cerrado de tórax

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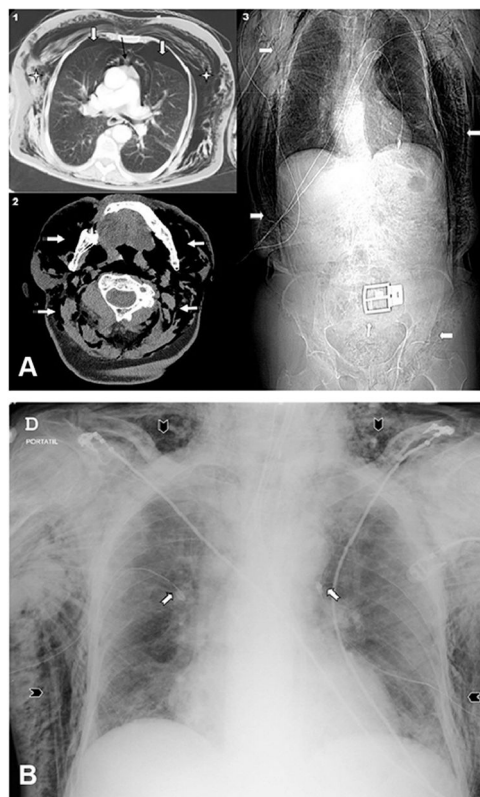


Fig. 1.

A 77-year-old man presented with swelling of the chest, neck, face, abdomen and upper limbs following a ground level fall. The patient complained of chest pain and was unable to open his eyes due to the swelling. He was tachycardic, tachypneic but presented normal oxygen saturation.

Computed tomography (Fig. 1A) showed fracture of four ribs, bilateral pneumothorax (white arrows), severe pneumomediastinum (black arrow) and massive subcutaneous emphysema (stars) that extended from the orbital and occipital region to the scrotum (white arrows) and a humeral fracture. Chest tubes (white arrows) were placed with full lung expansion (Fig. 1B), persistence of severe subcutaneous emphysema (black arrows). The patient did not required any other intervention and made a full recovery 5 days later.

Blunt chest injury can cause pneumomediastinum as consequence of traumatic disruption of the trachea-bronchial tree. Less common rib fractures may cause pneumothorax and subcutaneous emphysema and even less common are cases in which the subcutaneous emphysema in as severe as in this patient.

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