

Foreign body aspiration passing from bronchus to aorta

Bronştan aortaya geçen yabancı cismin aspirasyonu

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A 24-year-old woman who reported aspirating a scarf pin two weeks ago was admitted to the intensive care unit due to massive hemoptysis. Chest radiography showed linear opaque material superimposed on the descending aorta in the lower

zone of the left lung (Figure 1a). Thoracic computed tomography (CT) revealed an echogenic object consistent with a pin extending from the left main bronchial wall into the aortic lumen just prior to the bifurcation of the left main bronchus (Figures 1b-d).

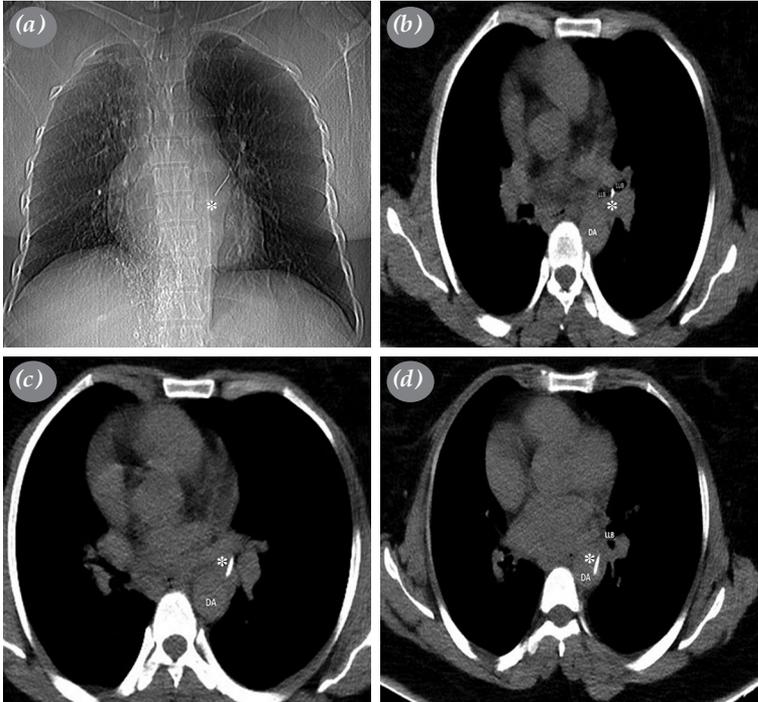


Figure 1. (a) Chest radiography showing a scarf pin in the left lower zone (*). (b) On thoracic computed tomography, the scarf pin is seen at the left main bronchus bifurcation (*), (c) passing through the bronchial lumen to the aorta, at the aortic border (*) and (d) within the aortic lumen (*).

FB: Foreign body; DA: Descending aorta; LUB: Left upper bronchus; LLB: Left lower bronchus.

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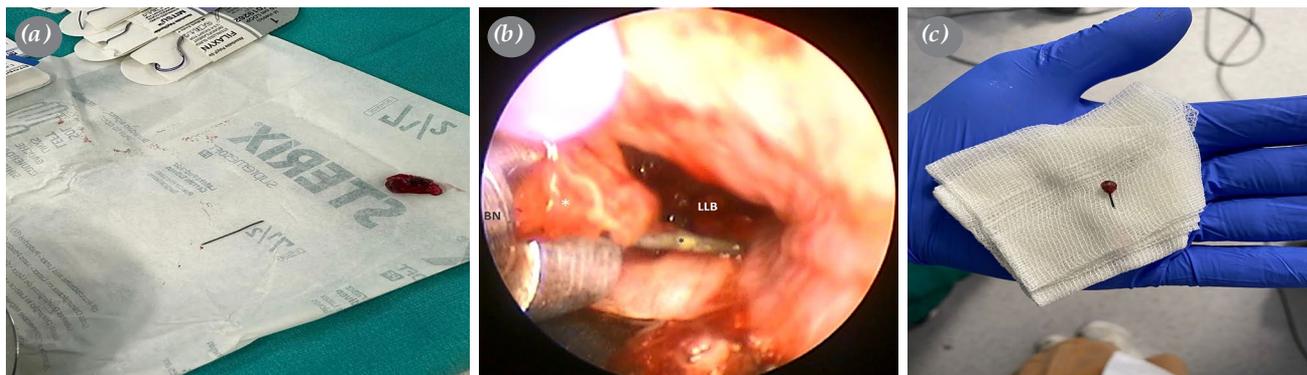


Figure 2. (a) A scarf pin fragment was removed from the aortic part through thoracotomy by the Thoracic Surgery Team. (b) Removal of the rest of the scarf pin in the bronchus by rigid bronchoscopy. (c) The scarf pin removed from the bronchus using a rigid bronchoscope is seen.

BN: Biopsy needle; LLB: Left lower bronchus.

The patient underwent thoracotomy performed by the Thoracic Surgery Team, during which the hilus was dissected, revealing the pin extending from the inferior bronchus into the aorta. The scarf pin was clamped and cut using a wire cutter at the bronchial end, and the aortic portion was surgically removed (Figure 2a). Afterwards, primary suture was placed on the aorta. Rigid bronchoscopy was conducted under general anesthesia to extract the remaining portion of the scarf pin lodged in the bronchus. The bronchoscopic examination revealed a coagulum distal to the left main bronchus. The coagulum was successfully cleared using cryobiopsy, revealing the presence of half of the scarf pin, which remained connected to the pinhead. The remaining portion of the scarf pin was subsequently visualized and extracted using a biopsy needle (Figure 2b and c).

In adults, although foreign body aspiration is less frequent, it can still be life-threatening.^[1] However, particularly in Islamic countries such as Türkiye, scarf pin aspiration in adults is common.^[2] Scarf pin aspiration has a significant morbidity and potential mortality. Radiopaque inorganic materials like scarf pin aspirations are easily diagnosed and localized with poster anterior chest X-rays.^[2] Although treatment modalities such as rigid bronchoscopy, flexible bronchoscopy, laryngoscopy and thoracotomy are used in patients with scarf pin aspiration, thoracotomy is more frequently required due to distal migration of the pin into the sub segmental bronchi due to its small size.^[3]

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