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IMAGES IN EMERGENCY MEDICINE

Trauma

Young man with dysphagia

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1 | PATIENT PRESENTATION

A 28-year-old man with a history of multiple emergency department presentations related to foreign body ingestion secondary to uncontrolled schizophrenia presents with a complaint of dysphagia for the past 2 weeks. The patient's vital signs were as follows: temperature, 101.6°F; heart rate, 131 bpm; blood pressure, 150/75 mm Hg, and RR, 18. Physical examination revealed a small -1- cm wound in the mid-sternum with overlying granulation tissue. Anteroposterior and lateral chest X-rays revealed a foreign body projecting through the mediastinum (Figure 2). Computed tomography angiography of the chest revealed an 8.7 cm metallic nail penetrating the sternum with a surrounding anterior mediastinal hematoma measuring 7.2 × 4.6

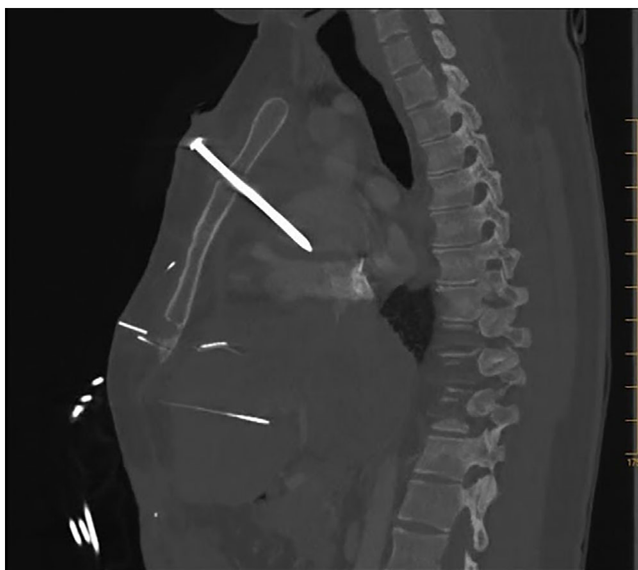

FIGURE 1 Computed tomography angiography of the chest revealed an 8.7 cm metallic nail penetrating the sternum

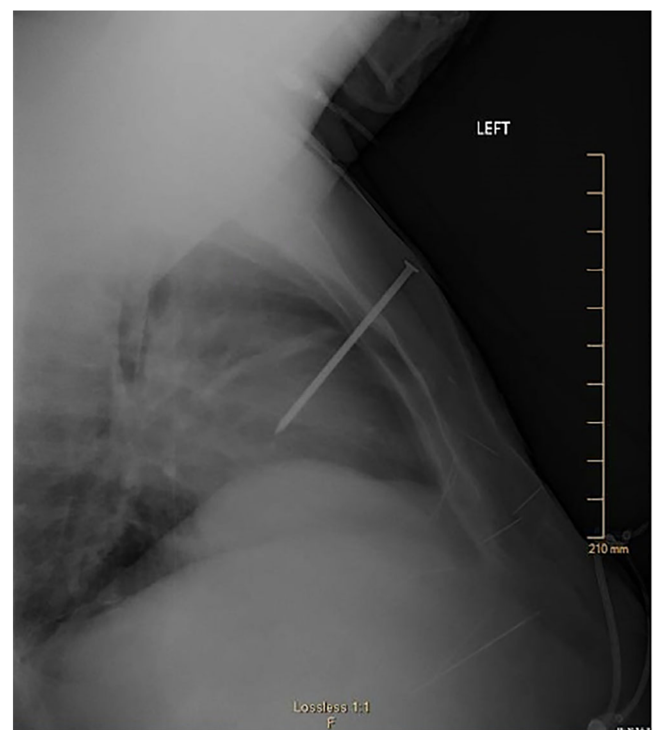

FIGURE 2 Lateral radiograph identifies metallic foreign body that has penetrated through the sternum and mediastinum

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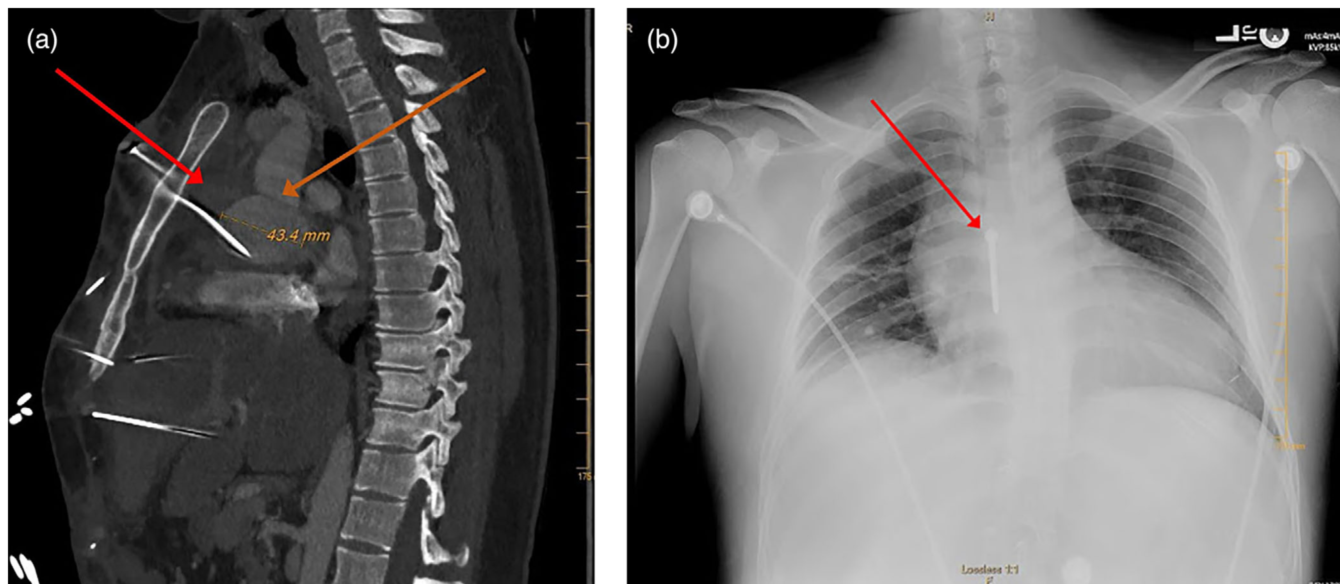

FIGURE 3 A (red arrow) identified a surrounding anterior mediastinal hematoma measuring 7.2 × 4.6 cm. B (Orange arrow) The distal nail is seen lying within a pseudo-aneurysm of the ascending aorta measuring 4.4 × 4.3 cm. The tip of the arrow points to the intimal flap

(Figures 1, 3A, red arrow). The distal nail is seen lying within a pseudo-aneurysm of the ascending aorta measuring 4.4 × 4.3 cm (Figure 3B, measurement shown with orange arrow pointing toward intimal flap). The distal nail is seen lying within a pseudo aneurysm of the ascending aorta (Figure 3A). The patient was emergently taken to the operating room where the nail was identified and extracted. Purulent drainage and large emboli were noted around the distal nail. A 1.5-inch diameter opening of the aortic wall was appreciated and was subsequently repaired with a Cormatrix patch. Further history obtained revealed that the patient used a nail gun to self-inflict this wound 2 weeks prior to presentation.

2 | DIAGNOSIS

2.1 | Dysphagia aortica–self-inflicted aortic injury

Due to the proximity of the aorta to the esophagus, a variety of aortic abnormalities can cause dysphagia including aortic dissections and aortic aneurysms.[1] Choosing to evaluate for a suspected benign etiology of dysphagia without considering this more sinister cause can lead to delays in diagnosis and increased morbidity and mortality when aortic injury is present.[2] Additionally, chronicity of dysphagia cannot successfully rule out aortic abnormalities as this patient had been ambulatory for 2 weeks. Although rare, pathology of the aorta has been demonstrated to cause chronic dysphagia.[3]

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