

**IMAGES IN EMERGENCY MEDICINE**

## Cardiovascular

**Man with chest pain**Li-Hao Yap MD<sup>1</sup> | Po-Wei Chen MD, MS<sup>1,2</sup> <sup>1</sup>Division of Cardiology, Department of Internal Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan<sup>2</sup>Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan**Correspondence**

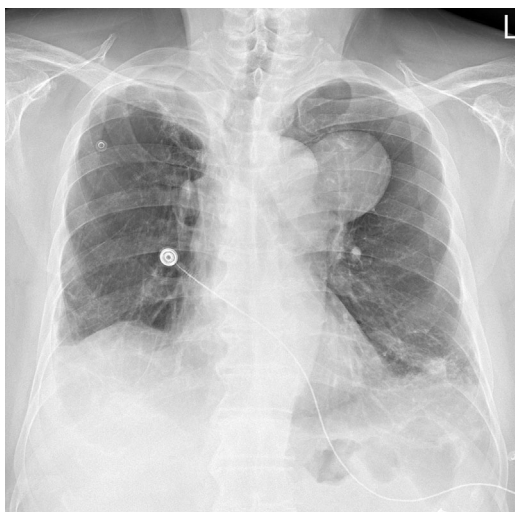
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**1 | PATIENT PRESENTATION**

A 75-year-old man, with a medical history of colon cancer and lung metastasis who was treated with chemotherapy and lung tumor resection, presented to the emergency department with distressing symptoms of chest pain and profuse sweating. An initial chest x-ray revealed a troubling finding— a protruding mass in the left mediastinum (Figure 1). Computed tomography (CT) was performed.



**FIGURE 1** Chest x-ray showed a left mediastinal mass with loss of aortic silhouette.



**FIGURE 2** Chest computed tomography showed a partial thrombosed aortic arch saccular aneurysm, about 6.4 cm in diameter.

**2 | DIAGNOSIS***Thoracic aortic aneurysm*

Subsequent chest CT confirmed the presence of a substantial saccular aneurysm involving the aortic arch (Figure 2). Prompt intervention

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was crucial, and the patient underwent thoracic endovascular aortic aneurysm repair. Fortunately, the procedure proceeded smoothly without any complications, and the patient's recovery was marked by its uneventfulness.

Thoracic aortic aneurysms can manifest as distinctive radiographic features on chest x-rays, including mediastinal widening, an enlarged aortic knob, or deviation of the trachea. However, it is often challenging to differentiate between an enlarged aortic silhouette due to a tortuous aorta, an aortic aneurysm, or a mediastinal tumor in direct contact with the aortic wall based solely on chest x-ray findings.<sup>1</sup> Hence, it is crucial to maintain a low threshold for ordering tomographic imaging to precisely define the anatomy of the aorta in these cases.

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#### CONFLICT OF INTEREST STATEMENT

Both of the authors have no conflicts of interest.

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#### REFERENCE

1. Isselbacher EM. Thoracic and abdominal aortic aneurysms. *Circulation*. 2005;111(6):816-828.

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