

CASE IMAGE

A frequently overlooked cause of chest pain: Acute aortic intramural hematoma

Göğüs ağrısının sıklıkla gözden kaçan bir nedeni: Akut aortik intramural hematom

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A 72-year-old female, with a history of hypertension and smoking, presented to our emergency department with severe chest pain radiating to the left shoulder and the back. Her electrocardiogram was normal and high-sensitive cardiac troponin T levels were observed at 21 pg/mL (Roche Diagnostics GmbH, Mannheim, Germany). An echocardiogram revealed a dilated ascending aorta, an asymmetric aortic wall thickening with a hypoechoic texture, an eccentric aortic lumen, and pericardial effusion (Video 1*). For further investigation, a cardiac computed tomography was ordered, and it revealed an acute aortic intramural hematoma (IMH). Focal, crescentic, high-attenuating regions of the eccentrically thickened aortic wall (high-attenuation crescent sign) appeared on noncontrast computerized

tomography (CT) (Figure 1). An enlarged aorta with thickened aortic wall, but without an intimal flap, was observed in contrast-enhanced CT images (Figure 2, Video 2*). IMH extended from the root to the abdominal segment of the aorta and coronary arteries were observed to be normal. After the diagnosis of acute intramural hematoma, the patient underwent successful aortic surgery and was discharged a week later. This case demonstrates the importance of high level of suspicion and prompt evaluation, and non-contrast imaging, which is essential for the diagnosis of IMH.



Figure 1. Unenhanced axial image showing a crescentic, hyperattenuating intramural fluid collection (arrow).

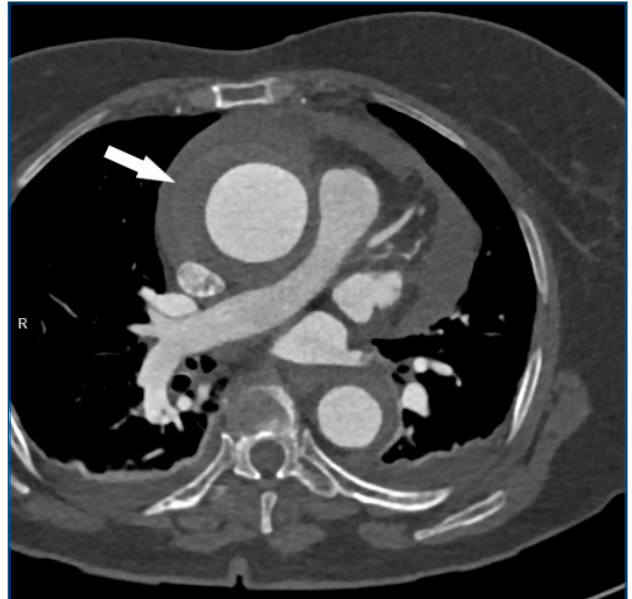


Figure 2. Contrast, material-enhanced axial image depicting a smooth, nonenhancing, crescentic region of aortic wall thickening (arrow) without an intimal flap.

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Informed consent was obtained from the patient for the publication of the case image and the accompanying images.

*Supplementary video files associated with this article can be found in the online version of the journal.

