

Penetrating aortic ulcer causing intramural haematoma presenting as pericarditis

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An 81-year-old male presented with severe central chest pain lasting for approximately 5 min followed by a transient loss of consciousness. Physical examination revealed symmetrical radial pulses and a blood pressure of 100/76 mmHg in both arms. Electrocardiography changes were consistent with pericarditis (Figure 1). An emergency transthoracic echocardiography revealed a moderate-sized pericardial effusion (Figure 2, asterisk) with no evidence of aortic regurgitation or features suggesting tamponade. CT demonstrated a punched out ulcer of the ascending aorta [Figures 3 (sagittal view) and 4 (axial view), arrows] with circumferential haemorrhage within the aortic wall (Figure 4, asterisk) and bilateral pleural


effusions, but without any evidence of aortic intimal flap. We made a diagnosis of intramural haematoma from a penetrating aortic ulcer and the patient was immediately referred to the cardiothoracic surgeons. He underwent an emergency resuspension of the aortic valve, repair of the aortic root and replacement of the full ascending aorta and hemi-arch using size 34 InterGard graft. Perioperative findings revealed an extensive intramural haematoma resulting from penetrating ulcer, large ascending aorta aneurysm and haemorrhagic pericardial effusion. Although he developed post-operative atrial fibrillation requiring anticoagulation, he made an excellent recovery and was discharged 11 days after admission. 

Figure 1 Electrocardiogram consistent with pericarditis

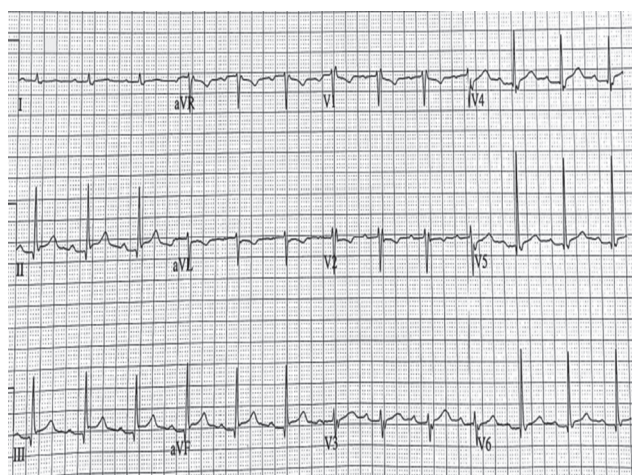
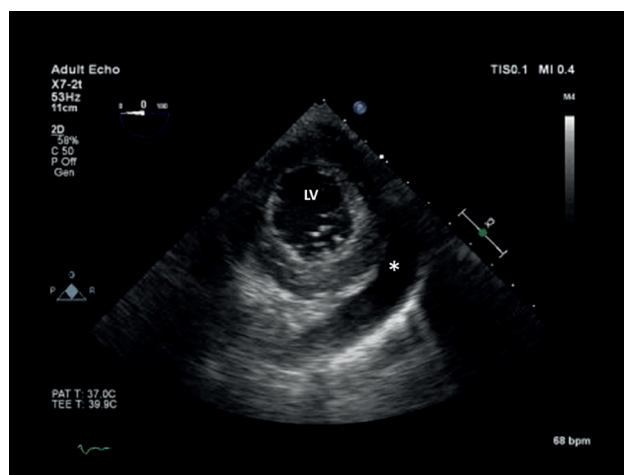


Figure 2 Echocardiogram, short-axis view, demonstrating large pericardial effusion (asterisk). LV: left ventricle



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Figure 3 CT, sagittal oblique view, showing penetrating aortic ulcer (arrow)

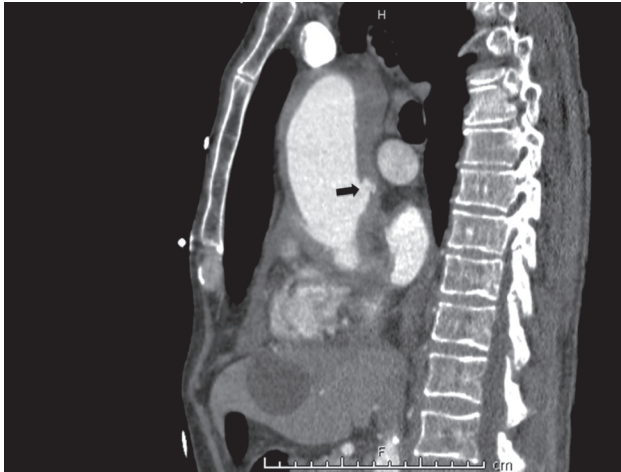


Figure 4 CT, coronal view, demonstrating penetrating aortic ulcer (arrow) and intramural haematoma (asterisk)

