
Clinical vignette

Infarct-related left ventricular diverticulum

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A 64-year-old woman presented with sudden onset central chest pain. Her ECG showed dynamic anterior, inferior, and lateral ST changes, suggestive of ischaemia. Her 12h troponin I was 17.04 ng/mL (normal <0.1).

She was treated with enoxaparin, aspirin, clopidogrel, and atenolol, and in view of recurrent pain, tirofiban was started 2 days later. She subsequently underwent coronary angiography. This showed moderate disease in the proximal LAD and RCA with severe disease in the small but non-dominant circumflex artery. Left ventricular (LV) angiography showed good LV function with filling of a diverticulum (Image); contrast cleared rapidly from the diverticulum, indicating contractile function.

To assess further, she had a CT scan. This demonstrated a narrow-necked diverticulum extending from the LV into the posterior wall. Her condition was managed conservatively. She was discharged pain free.

LV diverticulae following myocardial infarction are rarely reported. The pathogenesis is unclear but such diverticulae are believed to result from incomplete LV rupture caused by haemorrhagic dissection extending outwards from the endocardium but arrested within the infarcted LV wall. Resorption and organization of the haematoma leads to diverticulum formation.

Supplementary movies are available at *European Heart Journal* online.