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Aortic valve endocarditis associated with LV aneurysm secondary to previous infarct

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DESCRIPTION

Rupture of the free wall of the left ventricle (LV) is a catastrophic complication occurring in 4% of patients after myocardial infarction (MI) and in 23% of those who die of MI.¹

The posterior wall is the frequent location of a false ventricular aneurysm,² because anterior or lateral LV ruptures are unlikely to be contained, resulting in sudden death.

A 69-year-old male patient with a history of previous myocardial infarction presented with worsening breathlessness and fever. On admission, echocardiography was indicative of aortic valve endocarditis with an incidental finding of LV aneurysm. Blood cultures grew *Streptococcus viridans*. The patient underwent aortic valve replacement, coronary artery bypass graft and plication of the LV aneurysm (figure 1) using teflon strips buttress (figure 2). Postoperative recovery was uneventful with improvement in contractile function.

A thin or disrupted myocardium moves dyskinetically or the cavity can be non-contractile, leading to congestive heart failure or to dangerous ventricular arrhythmia. Stagnant flow may lead to thrombosis or embolic events, thus the mere presence of a thrombus inside the cavity can enable a correct diagnosis of LV aneurysm.

Figure 1 Arrow showing left ventricle aneurysm.

Figure 2. Arrow showing repaired left ventricle aneurysm with teflon strips.

The aim of surgical therapy is to exclude the mass of abnormal myocardium improving wall compliance, reducing filling pressure and bringing about enhanced contractile performance.

Learning points

- ▶ Left ventricle (LV) false aneurysm may have a long insidious course and may only be diagnosed incidentally.
- ▶ It is usually formed posteriorly as part of a contained LV rupture due to previous myocardial infarction. The treatment is surgical resection and it is usually a part of a complex operation. The 'neck' of the pseudoaneurysm is usually apparent as a fibrous ring that communicates with the LV.

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