Left ventricular pseudoaneurysm

A 59-year-old woman with diabetes mellitus type II presented with subacute myocardial infarction in a rural hospital. After two days of conservative treatment, she developed cardiac shock within few hours, and the patient was transferred to our department. Transthoracic echocardiography showed new-onset pseudoaneurysm of the left ventricle

(panels A and B), communicating through a narrow base of the antero-lateral wall (panel C). Emergency operation with successful resection of the pseudoaneurysm was performed (panel D). Despite a prolonged postoperative stay in the intensive care unit complicated by wound infections and critically ill polyneuropathy, the patient finally recovered.

While free wall rupture occurs in up to 2% of patients with myocardial infarction and is responsible for nearly 20% of all infarction-related deaths, formation of a pseudoaneurysm is a rare event [1]. Pseudoaneurysm develops in the softened necrotic area where hematoma, thrombus and pericardium originally sealed an incomplete rupture of the left ventricle. This condition has to be distinguished from a true aneurysm which has a wide base and contains myocardial elements in its wall. As in this case, prompt echocardiographic diagnosis is essential [2], as pseudoaneurysms have a high risk of free rupture, leading to hemopericardium and in most cases death from cardiac tamponade. Patients can be salvaged only by emergency surgical repair [3].

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