Post-infarction rupture of the heart into the pericardium. Surgical treatment with patch and fibrin glue. [French]

Authors: Robin J., Ninet J., Jarolin G., Dugres B., Chassignolle J.F., Champsaur G.

Publication Date: 1994

Abstract:

A 66-year old man was hospitalized with chest pain and acute ischaemia of the lower limbs highly suggestive of dissection of the aorta. Computed tomography and aortography however showed pericardic effusion and thrombosis situated in the iliac bifurcation of the aorta. During the emergency

operation, acute tamponade required sub-xyphoid drainage. The haemodynamic situation was

reestablished and the operation continued but within minutes a cataclysmal haemorrhage occurred

through the drainage tube due to ischaemic rupture of the lateral wall of the heart into the

pericardium. Extra-corporal circulation was installed immediately and a large polytetrafluoroethylene

patch was sutured to the epicardium, distally from the necrosed area, in healthy tissue. A biological

fibrin glue was injected under the patch. The operation was terminated with an axillo-bifemoral

bypass. The postoperative period was satisfactory and the patient was discharged. At the six

months examination, the patient was in NYHA class II and the echography showed moderate left

ventricular dysfunction with grade II mitral regurgitation and a false aneurysm facing the area of

necrosis. This technique allowed us to patch the rupture without excessive tension on the sutures in

the fragile tissue which would have increased the risk of secondary rupture. In addition, the large

patch avoided excessive reduction in volume of the left ventricular cavity and saved the mitral

chordae which would have been destroyed by direct suture. This method can be an effective

salvage technique for heart rupture during the acute phase of myocardial infarction and offers the

possibility of a second look in case of a secondary false aneurysm.