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

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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.