Sutureless repair for left ventricular free wall rupture after acute

myocardial infarction.

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Abstract:

We report three cases of left ventricular free wall rupture (LVFWR) after acute myocardial infarction,

which were repaired using a sutureless technique without cardiopulmonary bypass. At operation, a

sheet of fibrin tissue-adhesive collagen fleece (TachoComb) was secured to the hematoma

surrounding the tear and the infarcted area under compression by the surgeon's fingers. After

complete hemostasis, several sheets of an absorbable gelatin sponge (Gelfoam) were glued onto

the collagen fleece in layers. Intra-aortic balloon pumping was electively performed. Concomitant

coronary artery bypass grafting was not carried out. All patients survived the operation but

recurrence of the rupture occurred on postoperative day 10 in one patient and an LV aneurysm was

found four months after repair in another patient. The sutureless technique may be a simple and fast

option for treatment of an oozing type LVFWR; however, careful follow-up is mandatory.

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