

Subacute left ventricular free wall rupture following acute myocardial infarction

Akut miyokart enfarktüsü sonrası subakut sol ventrikül serbest duvar rüptürü

Marc-Alexander Ohlow

Eva-Maria Gey[#]

Bernward Lauer

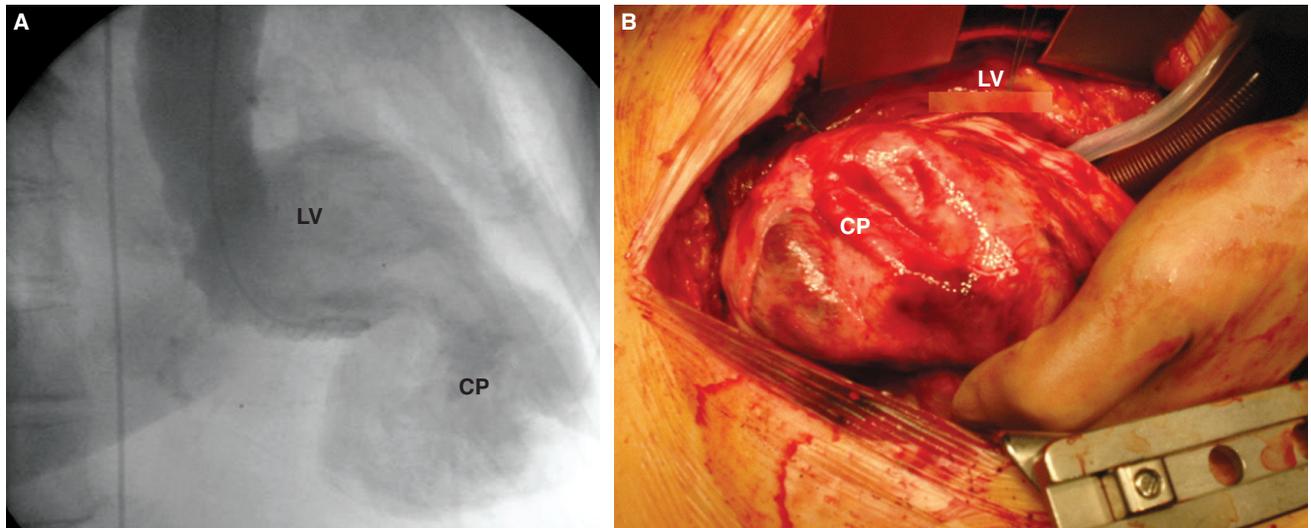
Departments of Cardiology,
[#]Cardiosurgery, Zentralklinik,
 Bad Berka, Germany

Perforation or rupture of the left ventricular free wall is a dramatic and often fatal complication that typically occurs three to five days after the onset of acute myocardial infarction.

An 82-year-old woman was transferred to our

hospital for coronary angiography after an episode of chest pain four days ago accompanied by a positive troponin test. Coronary angiography showed a single vessel disease with a medially occluded left anterior descending (LAD) coronary artery and a covered rupture (CP) of the left ventricular apex into the pericar-

dium with a 9 x 7 cm partly thrombosed mass adjacent to the left ventricle (Fig. A, B, Video 1*). The patient immediately underwent an operation with coronary artery bypass grafting of the left internal mammary artery to the LAD and repair of the rupture with a PTFE-(polytetrafluorethylene)-patch. Intraoperative findings (Fig. B) and histologic examination of the resected specimen confirmed the diagnosis of covered rupture of left ventricular free wall. The postoperative course was uneventful and the patient was discharged without sequelae. The incidence of rupture of left ventricular free wall is reported as high as 0.5-2% of all acute myocardial infarctions. Rupture of left ventricular free wall happens more frequently in the following groups: patients with large anterior wall infarctions, women, and increased age.



Figures– (A) Left ventricular angiogram showing the left ventricle (LV) and the free wall perforation (CP). **(B)** Intra-operative view demonstrating the anatomical relationship of the left ventricle and the adjacent mass. LV: Left ventricle; CP: Free wall perforation. *Supplementary video file associated with this presentation can be found in the online version of the journal.

