this modified method may help prevent late left ventricular remodeling.

This method may allow surgery in patients with hyperacute phase illness. It may help prevent pneumonia or multi-organ failure in patients awaiting surgery. Further investigations are warranted.

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EDITORIAL COMMENTARY

Surgery for postinfarction ventricular septal rupture

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Dr Komeda has described an useful modification of the infarct exclusion technique to treat left ventricular septal rupture following an acute myocardial infarction.¹ Instead of using a preshaped patch of glutaraldehyde-fixed bovine pericardium that excludes the infarcted septum by suturing it to the healthy myocardium all around with a simple running suture taking deep bites, as we described more than 2 decades ago,² the author used a large strip of patch and secured it to the healthy septum with a double layer of continuous horizontal mattress sutures, applied Bio-Glue (Cryolife, Kennesaw, Ga) in between the layers, and then tailored the patch to exclude the left ventricular cavity from the infarct. The patient did well, and demonstrated no recurrent defect 6 months later. This modification is probably useful for surgeons who have to manage this type of mechanical complication of myocardial infarction.

Rupture of the ventricular septum following acute myocardial infarction has become a rare disorder in North America. During a 7-year period starting in 1987, we operated on 45 patients with acute septal rupture,² whereas in the most recent 7-year period we had only 9 patients. A report based on the

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Central Message

Postinfarction ventricular septal rupture is a rare mechanical complication of transmural myocardial infarction, and surgical expertise is difficult to develop.

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Society of Thoracic Surgeons Database for 1999 to 2010 noted that approximately 232 to 297 operations were performed per year in a total of 666 cardiac units surveyed.³ It is very difficult to teach operative techniques when the disease is so uncommon and its surgical treatment is often disappointing.³ In addition, anterior septal wall ruptures are often associated with extensive necrosis of the left ventricle and relatively minor necrosis of the right ventricle, whereas posterior ruptures involve

more limited necrosis of the left ventricle but often extensive damage of the right ventricle.⁴ The size of the myocardial infarction also plays an important role in the outcome of these patients.

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