

We present the case of a 66-year-old female patient with no significant past medical history presenting with chest pain that was treated with antacids by her primary care physician.

The next day she presented to the emergency room, where an electrocardiogram revealed posterolateral ST elevation myocardial infarction.

The patient was immediately taken to the catheterization lab.

A successful percutaneous intervention was performed on an acutely occluded large ramus intermedius vessel that was supplying a large portion of the lateral wall (Figure 1).

The patient did well initially, but several hours later she suddenly went into cardiogenic shock.

An intra-aortic balloon pump was placed, and an echocardiogram demonstrated that she had severe mitral regurgitation from a ruptured papillary muscle (Figure 2).

The patient, on maximal support, deteriorated rapidly with progressive acidosis, oliguria, and florid pulmonary edema.

In spite of the very high risk, we decided to intervene surgically.

Once in the operating room, transesophageal echocardiography confirmed severe mitral regurgitation with a ruptured anterolateral papillary muscle and a small left atrium.

Shortly after the patient was put on cardiopulmonary bypass, the acidosis resolved and she began to make urine.

Excellent visualization of the mitral valve was obtained using a vertical transseptal approach through the right atrium.

The valve was carefully inspected and the necrotic ruptured anterolateral papillary muscle was seen (Figure 3).

There was a large chunk of muscle attached to the A1 chordal apparatus.

The anterior leaflet of the mitral valve was excised while keeping the posterior leaflet intact.

A 27-mm St Jude Epic bioprosthesis was inserted (Figure 4).

She was placed on extracorporeal membrane oxygenation that was successfully weaned 3 days later.

Following this, she made a remarkable early recovery.

One month later, just prior to discharge, she expired after developing pneumonia that progressed to sepsis with multiorgan failure.