

Intervention for Post MI Mechanical Complication: When and How?

Although primary percutaneous coronary intervention makes big progress in reducing mortality in acute myocardial infarction patients, there are still have some cases with severe mechanical complication. Ventricular septum rupture is one of the mechanical complications but always causing hemodynamic unstable and needs urgent surgical repairs. The incidence of VSR has decreased from 1-3% following ST-segment elevation MI in the pre-reperfusion era to 0.17-0.31% following primary PCI. Surgical repair is the gold standard treatment for post-infarction VSR. However, the timing of surgical repair had different outcomes. According to the registry data from the Society of Thoracic Surgeons National Database showed an overall in-hospital or 30- day mortality of 42.9%, the highest of any cardiac surgeries, with a sharp decrease in mortality with delay in repair: 54.1% with repair within 7 days from MI versus 18.4% after 7 days. VSD occlude used to treat congenital heart device and now can be used to treat ventricular septum rupture as well.