Patch-and-glue sutureless repair for blowout rupture after myocardial infarction: report of two cases.

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Abstract:

A blowout cardiac rupture is sudden and dramatic. The most appropriate surgical repair remains controversial. We report our experience with blowout rupture treated by sutureless technique. The two cases were males aged 58 and 79 years respectively. Echocardiography confirmed the diagnosis of cardiac rupture. Resuscitation was continued in the operating suite, and the myocardial tear and necrotic area were covered with two sheets of fibrin tissue-adhesive collagen fleece and an equine pericardial patch secured to the heart surface with biologic glue with the aid of cardiopulmonary bypass. Both patients survived and were discharged from our hospital. One has been doing well for 15 months after surgery and the other remains breathing on his own but otherwise nonreactive for 20 months since. We have adopted a patch-and-glue sutureless technique instituting cardiopulmonary bypass for blowout rupture. Cardioplegic arrest was performed to achieve a bloodless surgical field and maximize glue function. All rupture sites should be covered with a properly large patch. This technique is simple, versatile, and considered to be associated with a favorable outcome.