Patch-and-glue sutureless repair for blowout rupture after myocardial

infarction: report of two cases.

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Publication Date: 2008

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.