Fibrin sealant for early repair of acquired ventricular septal defect.

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Abstract:

The trend toward early operation for acquired ventricular septal defects exposes the patient to major perioperative bleeding and residual shunt because of the fragility of the recently necrosed myocardium. To reduce these complications we have used a fibrin sealant to reinforce the cardiac tissues in addition to the usual closure of the defect with a Dacron patch through a left ventricular septum around the defect, area. During cardiac arrest fibrin sealant is applied on the ventricular septum around the defect, between the septum and the patch, and on the edges of the ventriculotomy. This technique was used in three patients (mean age 68.2 years) operated on for an acquired ventricular septal defect within 4 days of the infarction and within 24 hours of the occurrence of the defect. Low postoperative bleeding, absence of recurrent shunt, and good ventricular function indicated satisfactory surgical result in all three patients. We suggest that the use of fibrin sealant during operations for acquired ventricular septal defects, by reinforcing the necrotic and fragile tissues, may reduce perioperative bleeding and assure a more solid implantation of the patch.