# Effectiveness of fibrin glue in the reduction of postoperative intrapericardial adhesions.

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## Abstract:

The hemostatic properties of fibrin sealant have been well described. Previously published reports have attempted to clarify the possible role of fibrin glue in the inhibition of the formation of intrapericardial adhesions following cardiac surgery. Earlier work hypothesized that fibrin glue may reduce the severity of postoperative adhesions and that the use of autologous fibrin glue may have similar effects, without the risks that accompany homologous blood products. Six juvenile farm pigs were utilized to test this hypothesis. Conventional fibrin glue and single-donor fibrin glue were tested in open-heart surgery. This experimental model was also reexamined and found to be of significant utility in simulating adult reoperative cardiac surgery. The fibrin glue subjects were universally easier to reoperate due to fewer adhesions, as demonstrated grossly and histologically. The single-donor fibrin glue had no significant advantage on adhesion formation, when compared to the conventional fibrin glue group, but the ramifications of formulating fibrin glue in this fashion offer a significant benefit toward the complete use of autologous blood products in open-heart surgery.