# Application of a fibrin glue to the hepatic dissection surface. [Japanese]

Authors: Inada S.

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## Abstract:

A major problem in hepatectomy is the lack of an effective method to control diffuse hemorrhage from the dissected surface of the hepatic parenchyma. Poor prognoses are often related to this problem. Attempts were made in the 1940s to use fibrinogen, found in living bodies, as an adhesive. These attempts were renewed in the 1970s when high concentration fibrinogen solution became available and when maintenance of the fibrin mass for long periods became possible because of the discovery of blood coagulation factor XIII and the introduction of aprotinin, a proteolytic enzyme inhibitor. We studied the safety and efficacy of a fibrin glue as a hemostatic in various animals (Wistar rats, white rabbits, and Gottingen miniature pigs). After experimental hepatectomy, the fibrin glue was applied to the hepatic dissected surface. In addition to safety and hemostatic effects, histological changes on standing were also observed. As the results of the following clinical use, the fibrin glue was replaced by the hepatic tissues in about one week and caused no disturbance in wound healing. Bleeding volume was minimized by applying fibrin glue to the hepatic dissection surface.