Fibrin glue effectiveness and tolerance after elective liver resection: A

randomized trial.

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Abstract:

Background/Aims: The propensity of fibrin glue to achieve ultimate control of the liver raw surface

and its tolerance after hepatic resection, were evaluated by a prospective study. Materials and

Methods: Seventy seven patients undergoing elective liver resection, for benign lesions (n = 35) and

malignant lesions (n = 42) including 7 with cirrhosis were studied. Randomization took place only at

peritoneal closure and after completion of hemostasis and biliostasis. Results: In the group with

fibrin glue (n = 38), a single dose of 5 ml was applied to the liver cut surface. The appearance of the

Liver margin at abdominal closure was judged as dry in 34/35 (97%) patients with fibrin glue, versus

34/42 (81%) in those without (p = 0.016). Although postoperative morbidity and mortality were not

different between the 2 groups, the mean total fluid drainage during the three postoperative days

and bilirubin concentration were significantly lower in the group with fibrin glue; respectively 242 +/-

249 ml vs 505 +/- 666 ml and 24 +/- 21 mmoles/l vs 65 +/- 47 mmoles/l. Conclusions: Our results

indicate that fibrin glue application to the hepatic stump after hepatic resection, provides effective

sealing with good systemic and local compatibility.