

Comparison of topical hemostatic agents in elective hepatic resection: a clinical prospective randomized trial.

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Abstract:

To compare the difference in efficacy of microcrystalline collagen powder (CL) and fibrin glue (FG) in elective hepatic resection, 62 patients (female 14, male 48) with ages ranging from 51 to 75 years were randomly allocated to receive either CL or FG as a topical agent during hepatectomy. There were no significant differences between the patients treated with CL (n = 31) and those treated with FG (n = 31) regarding sex, age, liver function, coagulation function, platelet counts, type of liver resection, and operative duration. A dry cut surface of the liver was obtained during surgery in 27 (87%) patients and 25 (81%) patients treated with CL and FG, respectively. Both CL and FG showed similar hemostatic effects. The CL and FG groups were not different in terms of postoperative rebleeding, bile leakage, or morbidity and mortality rates (6% vs. 6%, 6% vs. 6%, 45% vs. 39%, and 13% vs. 10%, respectively). Of the 52 patients with a dry cut surface of the liver during surgery, 3 patients in the CL group encountered rebleeding (n = 1) or bile leakage (n = 2) from the cut surface postoperatively, while no such complications were noted in the FG group. The results seem to favor FG for reliability in the postoperative period. The application of CL or FG may be better performed with consideration of the characteristics of each agent.