Sealing of the hepatic resection area using fibrin glue reduces

significant amount of postoperative drain fluid.

Authors: Eder F., Meyer F., Nestler G., Halloul Z., Lippert H.

Publication Date: 2005

Abstract:

Aim: To investigate whether the routine use of fibrin glue applied onto the hepatic resection area can

diminish postoperative volume of bloody or biliary fluids drained via intraoperatively placed

perihepatic tubes and can thus lower the complication rate. Methods: Two groups of consecutive

patients with a comparable spectrum of recent hepatic resections were compared: (1) 13 patients

who underwent application of fibrin glue immediately after resection of liver parenchyma; (2) 12

patients who did not. Volumes of postoperative drainage fluid were determined in 4-h intervals

through 24 h indicating the intervention caused bloody and biliary segregation. Results: Through the

first 8 h postoperatively, there was a tendency of higher amounts of fluids in patients with no

additional application of fibrin glue while through the following intervals, a significant increase of

drainage volumes was documented in comparison with the first two 4-h intervals, e.g., after 12 h.

149.6 mL +/-110 mL vs 63.2 mL +/-78 mL. Using fibrin glue, postoperative fluid amounts were

significantly lower through the postoperative observation period of 24 h (851 mL +/-715 mL vs 315

mL +/-305 mL). Conclusion: For hepatic resections, the use of fibrin glue appears to be

advantageous in terms of a significant decrease of surgically associated segregation of blood or bile

out of the resection area. This might result in a better outcome. © 2005 The WJG Press and

Elsevier Inc. All rights reserved.