Reduction in bile leaks following adult split liver transplant using a fibrin-collagen sponge: A pilot study.

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Abstract:

INTRODUCTION: Bile leaks are a frequent complication of adult split liver transplantation. We compared surgical complications in patients who had the cut surface of the donor liver treated with a patch to those in whom the cut surface of the liver was treated with fibrin glue.

MATERIAL AND METHODS: Two consecutive cohorts of 16 patients undergoing adult right lobe split liver transplant were compared. In the first cohort, the liver surface was treated with fibrin glue and in the second the liver surface was treated with TachoSil fibrinogen-thrombin-collagen patches. Post-operative complications were analyzed.

RESULTS: Bile leaks were significantly fewer among patients in whom the cut surface of the liver was treated with fibrin-collagen sponge compared to those where fibrin glue was used on the cut surface: 1/16 (6.25%) vs. 7/16 (43.75%), respectively; p=0.03. There were some differences in biliary anastomotic techniques used in the two groups but 7/8 leaks (87.5%) arose from the cut surface, and only one was from the anastomosis.

CONCLUSION: Using a fibrinogen-thrombin-collagen sponge patch may reduce bile leaks from the cut surface of the liver during adult right lobe split liver transplants.