Reduction of the closure time of postoperative enterocutaneous fistulas with fibrin sealant.

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Abstract:

AIM: To assess whether the use of fibrin sealant shortens the closure time of postoperative enterocutaneous fistulas (ECFs). METHODS: The prospective case-control study included 70 patients with postoperative ECFs with an output of < 500 mL/d, a fistulous tract of > 2 cm and without any local complication. They were divided into study (n = 23) and control groups (n = 47). Esophageal, gastric and colocutaneous fistulas were monitored under endoscopic visualization, which also allowed fibrin glue application directly through the external hole. Outcome variables included closure time, time to resume oral feeding and morbidity related to nutritional support. RESULTS: There were no differences in mean age, fistula output, and follow-up. Closure-time for all patients of the study group was 12.5 +/- 14.2 d and 32.5 +/- 17.9 d for the control group (P < 0.001), and morbidity related to nutritional support was 8.6% and 42.5%, respectively (P < 0.01). In patients with colonic fistulas, complete closure occurred 23.5 +/- 19.5 d after the first application of fibrin glue, and spontaneous closure was observed after 36.2 +/- 22.8 d in the control group (P = 0.36). Recurrences were observed in 2 patients because of residual disease. One patient of each group died during follow-up as a consequence of septic complications related to parenteral nutrition. CONCLUSION: Closure time was significantly reduced with the use of fibrin sealant, and oral feeding was resumed faster. We suggest the use of fibrin sealant for the management of stable enterocutaneous fistulas.