

Role of fibrin glue as a sealant to esophageal anastomosis in cases of congenital esophageal atresia with tracheoesophageal fistula.

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Abstract:

Objective: The aim of this study was to characterize a successful approach for the management of infants with long-gap esophageal atresia (EA) with tracheoesophageal fistula (TEF). The goal was to preserve the native esophagus and minimize the incidence of esophageal anastomotic leaks using fibrin glue as a sealant over the esophageal anastomosis. **Method:** A total of 52 patients were evaluated in this study. Only patients in whom, gap between the two ends of the esophagus was ≥ 2 cm were selected during January 2005 to January 2007. Patients were divided in two groups on the basis of block randomization. Group A comprised the patients in whom fibrin sealant was used as reinforcement on a primary end-to-end esophageal anastomosis; in group B, fibrin glue was not used. The two groups were compared in terms of esophageal anastomotic leak (EL), postoperative esophageal stricture (ES), and mortality. The statistical analysis was done using Fisher's exact test and the chi-squared test. **Result:** The number of anastomotic leaks in group A (glue group) was about one-fifth that in group B (no glue group). The incidence of ES was almost twice as high in group B as in group A. The mortality rate was almost threefold higher in group B (no-glue group). The higher incidence of EL and ES in group B compared to group A was statistically significant. **Conclusion:** Thus, fibrin glue when used as an adjunct to esophageal anastomosis for primary repair of long-gap EA with TEF appears safe in the clinical setting and may lower the chances of esophageal leak and anastomosis-site strictures. Hence, it can diminish the mortality and morbidity of these patients. © 2007 Societe Internationale de Chirurgie.