

# **The sealing effect of a fibrin tissue patch on the esophageal perforation area in primary repair.**

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## **Abstract:**

Background: The aim of this study was to investigate the efficacy of the fibrin tissue patch and to analyze its use in patients with esophageal perforation. Methods: We studied 28 patients who were diagnosed with esophageal perforation between January 1990 and January 2006 at Akdeniz University Hospital. Sixteen (57.14%) were male. The average age was 59 +/- 9 years. We performed surgery and primary repair reinforcement even if the diagnosis of esophageal perforation was late. Results: Twenty-three (82.14%) perforations were the result of endoscopic instruments; spontaneous perforations occurred in three (10.71%) patients. Postoperative complication (Heller myotomy) caused perforation in one patient (3.57%) and blunt trauma in one patient (3.57%). Three (10.71%) patients had cervical perforation, and 25 (89.29%) patients had thoracic esophageal perforation. Twelve (42.86%) patients underwent emergency surgery (within the first 24 h). Ten (35.71%) patients underwent surgery within 48 h, and the remaining 6 (21.43%) underwent surgery after 48 h. Nine (32.14%) patients had primary repair, 7 (25%) had reinforcement of the primary repair with fibrin tissue patch, 7 (25%) had esophagectomy and gastric pull-up, and 2 (7.14%) had drainage and placement of metallic stents. In four patients of the nine who had primary repair, fistula complication was detected, whereas in only one of the seven who had reinforcement of the primary repair with fibrin tissue patch was a fistula detected. Three patients (10.71%), two of whom had Boerhaave's syndrome, died. Conclusions: Surgical primary repair with fibrin tissue patch is the most successful treatment option in the management of esophageal perforation. © 2007 Societe Internationale de Chirurgie.