Background: Curative gastrectomy represents the treatment of choice for gastric cancer. A variety of clinicopathologic features, such as resection line involvement (RLI) has been suggested as prognostic indicators for gastric cancer. The aim of this study was to investigate whether microscopic positive margins are detrimental to the outcome of gastric cancer patients treated with gastrectomy.

Methods: Among 1087 consecutive patients who had undergone gastrectomy with curative intent for gastric cancer between January 1990 and December 2008, 116 patients (10.7%) had positive resection margins on final histology.

Results: Among these 116 patients, 48 had proximal and distal involved margins, 33 had proximal involved margins, and 35 had distal involved margins. No one patient had reoperation. The mean distance between proximal gastric margin and the neoplasia was 4±3.9 (min 0, max 21) and from the distal margin and the neoplasia 4±3.9 (min 0, max 24). In the multivariate analysis the TNM stage and status of the oesophageal margin were the only independent prognostic factors for survival. The negative margin group had a significantly longer median survival time (*P*<0.01). When both groups of patients were stratified according to nodal stage, a positive resection margin determined a worse prognosis only in patients with node-negative disease (mean survival time: 63 months vs. 21 months, *P*<0.0001). In early gastric cancer (EGC) the resection margin involvement did not influence survival. On the contrary, in more advanced diseases the positive margins is a negative prognostic factor for survival.

Conclusions: A positive gastric or oesophageal margin is an independent poor prognostic factor for long-term survival in stomach cancer in advanced disease or node positive patients.

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Minimally invasive esophagectomy for cancer: monoinstitutional experience

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Background: Minimally invasive esophagectomy is rapidly emerging as a suitable surgical alternative to the open technique. Our retrospective study aimed to evaluate the feasibility and efficacy of laparoscopic and thoracoscopic esophagectomy.

Methods: This retrospective study considers 41 consecutive patients treated with minimally invasive curative esophagectomy for cancer in our Institute from May 2002 to December 2007.

Results: Patients were 33 men (80.5%) and 8 women (19.5%) that underwent minimally invasive esophageal resection. Mean age was 65±10 years (range 37–79). Surgical indication was: adeno-carcinoma (n = 23, 56%), and squamous cell carcinoma (n = 18, 44%). Ten patients (24.4%) received neoadjuvant radiochemotherapy. Transhiatal laparoscopic esophagectomy was employed in 6 cases (14.6%), while in the remaining 35 cases a combined laparoscopic gastric mobilisation and right transthoracic incision (n = 19) or thoracoscopic approach (n = 16) was performed. Esophagogastric anastomosis was performed in the left neck (n = 30) or intrathoracic (n = 11). The mean operative time was 430±80 min (range 290–630). Conversion rate was 35% (7% during the abdominal operation and 28% during the thoracic operation). The mean time of hospital stay was 22±12 days (range 10–64). The median critical care unit stay was 3.6±5.4 days (0–26). In 10 patients (24.4%) there was an anastomotic leakage that no required a surgical treatment. Perioperative mortality was 4.8% (n=2). The histological examination demonstrated a radical excision (R0) in 92% of the cases; in the remaining 3 there was a positive radial margin. Stage of the neoplasm was: stage I in 9 patients (22%), IIa in 5 (12.2%), IIb in 8 (19.5%), III in 15 (36.6%), IV in 2 (4.8%). In 2 patients, previously treated with neo-adjuvant therapy, there was a complete pathological response. The mean number of lymph node retrieved was 17±11 (max 52). The mean time of follow-up was 17 months, whereas the mean survival was 28 months. Overall patient survival was 75% and 45% at 1 and 3 years, respectively.

Conclusion: In our experience, laparoscopic surgery for cancer of the esophagus appears to show satisfactory results as regards the operative outcome, the number of resected lymph nodes and resection margins.