Surgical factors influence the outcome after Ivor-Lewis esophagectomy with intrathoracic anastomosis for adenocarcinoma of the esophagogastric junction: a consecutive series of 240 patients at an experienced center.

Abstract:

BACKGROUND: Despite a considerable number of randomized studies, the surgical approach to locally advanced adenocarcinoma of the esophagogastric junction (AEG) I and II is still discussed controversially. Thus, we evaluated the surgical risk and outcome after an abdominothoracic esophagectomy (Ivor-Lewis) with intrathoracic anastomosis as standard procedure.

METHODS: Between 1998 and 2006, a total of 240 consecutive patients underwent standardized right thoracoabdominal esophagectomy with two-field lymphadenectomy and intrathoracic anastomosis (Ivor-Lewis operation) for AEG I (n = 206) or AEG II (n = 34). A total of 157 patients (65.4%) had neoadjuvant chemotherapy.

RESULTS: Postoperative morbidity occurred in 17.9% (43 of 240). Overall mortality was 3.8% (9 of 240). The majority of patients (4 of 9) died because of severe pulmonary complications (44.4%) irrespective of surgical complications. Neoadjuvant chemotherapy did not increase morbidity or mortality. The median overall survival was 51 months. Multivariate analysis including age>75 years, clinical response to chemotherapy, complications, R-category and N-category revealed R-category (P = .005; relative risk [RR] 0.32, 95% confidence interval [95%
CI] 0.14-0.70) and complications (P< .001, RR 0.16, 95% CI 0.08-0.35) as independent prognostic factors for all patients. Complications was the only independent prognostic factor (P< .001, RR 0.09, 95% CI 0.08-0.35) for the R0 resected patients. CONCLUSIONS: At an experienced center, Ivor-Lewis resection is a safe surgical procedure. Outcome of patients was significantly influenced by surgical factors such as complete resection and complications. Neoadjuvant chemotherapy did not lead to higher morbidity and mortality. The high mortality from non-surgery-related complications emphasizes the importance of careful preoperative evaluation of comorbidities and patient selection.