Post-therapeutic response evaluation by a combination of endoscopy and CT scan in esophagogastric adenocarcinoma after chemotherapy: better than its reputation.

Abstract:

Neoadjuvant chemotherapy is an accepted standard of care for locally advanced esophagogastric cancer. As only a subgroup benefits, a response-based tailored treatment would be of interest. The aim of our study was the evaluation of the prognostic and predictive value of clinical response in esophagogastric adenocarcinomas. Clinical response based on a combination of endoscopy and computed tomography (CT) scan was evaluated retrospectively within a prospective database in center A and then transferred to center B. A total of 686/740 (A) and 184/210 (B) patients, staged cT3/4, cN0/1 underwent neoadjuvant chemotherapy and were then re-staged by endoscopy and CT before undergoing tumor resection. Of 184 patients, 118 (B) additionally had an interim response assessment 4-6 weeks after the start of chemotherapy. In A, 479 patients (70 %) were defined as clinical nonresponders, 207 (30 %) as responders. Median survival was 38 months (nonresponders: 27 months, responders: 108 months, log-rank, p< 0.001). Clinical and histopathological response correlated significantly (p< 0.001). In multivariate analysis, clinical response was an
independent prognostic factor (HR for death 1.4, 95 %CI 1.0-1.8, p = 0.032). In B, 140 patients (76 %) were nonresponders and 44 (24 %) responded. Median survival was 33 months, (nonresponders: 27 months, responders: not reached, p = 0.003). Interim clinical response evaluation (118 patients) also had prognostic impact (p = 0.008). Interim, preoperative clinical response and histopathological response correlated strongly (p< 0.001). Preoperative clinical response was an independent prognostic factor in center A, while in center B its prognostic value could only be confirmed in univariate analysis. The accordance with histopathological response was good in both centers, and interim clinical response evaluation showed comparable results to preoperative evaluation.