Abstract:

BACKGROUND: We present the results of a prospective phase-II-study of neoadjuvant combined radiochemotherapy followed by surgical resection in patients with histological proven locally advanced squamous cell carcinoma of the esophagus located at or above the level of the tracheal bifurcation.

METHODOLOGY: Between February 1995 and March 2000 a total of 76 patients with esophageal squamous cell carcinoma (uT3/4N0+-categories) received simultaneous combined neoadjuvant radiochemotherapy consisting of a continuous intravenous infusion of 5-fluorouracil (300 mg/m²/day) 7 day per week concurrently with conventional fractioned external beam radiation therapy (2 Gy/day), five fractions per week up to a total dose of 30 Gy.

RESULTS: Radiochemotherapy related acute severe toxicity rate (CTC-grade-III) occurred in 34 patients, two patients died. Sixty-four patients underwent surgery with a complete resection in 48 patients. Three patients died during a 90-day post-operative course. The histopathological workup revealed no viable residual tumour cells in eight patients (ypCR) and according to the modified criteria of Mandard in 26 patients a histopathological response. Twenty-two of these patients underwent a R0-resection. The median follow-up time was 5.4 years.
with an overall median survival time of 20.6 months. The median survival in the 26 responders was 32.3 months versus 19.5 months in 38 non-responders (p=0.03). CONCLUSIONS: Patients with locally advanced squamous cell carcinoma of the esophagus, who respond to preoperative neoadjuvant combined radiochemotherapy, seem to have more benefit from subsequent resection than non-responding patients.