Radio(chemo)therapy for locally advanced squamous cell carcinoma of the esophagus: long-term outcome.

The purpose of this work is to report the long-term outcomes of three-dimensional conformal radio(chemo)therapy in the curative management of esophageal squamous cell carcinoma (ESCC). A retrospective analysis of patients treated with radio(chemo)therapy between 1988 and 2011 at Klinikum rechts der Isar, Technische Universität München was performed. In all, 168 patients received radio(chemo)therapy for ESCC in curative intention. The median follow-up time was 91 months (range 1-212 months). There were 128 men and 40 women with a median age of 63 years. Selection criteria for radio(chemo)therapy were unfit for surgery and/or unresectable primary tumor (n = 146, 87 %) or patients' choice (n = 22, 13 %). The majority of the patients received a combination of cisplatin and 5-fluorouracil chemotherapy with 54 Gy in 30 fractions of radiotherapy. The median overall survival (OS) was 20 months (95 % confidence interval 17-23 months). The OS at 2 and 5 years for the whole cohort was 41 ± 4 % and 22 ± 3 %, respectively. Forty patients (24 %) suffered an in-field recurrence. The most common acute nonhematologic toxicity>grade 2 was dysphagia in 35 % of the patients. Acute hematologic toxicity> grade 2 was recorded in 14 % of the patients. There was no grade 5 toxicity observed during the study. Poor
ECOG performance status (0-1 vs. 2-3, HR = 1.70, p = 0.002) and weight loss $\geq 10\%$ before the start of therapy (HR = 1.99, p = 0.001) were among the factors significantly associated with poor OS in multivariate analysis. Three-dimensional conformal definitive radio(chemo)therapy is well tolerated and leads to long-term survival in more than 20% of patients with advanced disease and/or contraindication to surgery. However, 24% in-field recurrence remains a major concern. Prospective trials are warranted to assess if a well-tailored conformal radiochemotherapy can improve the local control and obviate the need for surgical resection in patients with good general condition and potentially resectable tumors.