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Survival and symptom relief after palliative radiotherapy for esophageal cancer

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Purpose or Objective: The aim of this study was to assess the 6-months dysphagia-free survival, improvement in swallowing function, complication rate, and overall survival in patients with incurable esophageal cancer treated with palliative radiotherapy.

Material and Methods: We retrospectively reviewed data from 139 patients (median age 72 years) with advanced/recurrent incurable esophageal cancer, who were referred to 3 German radiation oncology centers for palliative radiotherapy between 1994 and 2014. Radiotherapy consisted of external beam radiotherapy (EBRT) with 30 - 40.5 Gy/2.5 - 3 Gy per fraction, brachytherapy alone (BT) with 15 - 25 Gy/5 - 7Gy per fraction/weekly and EBRT + BT (30 - 40.5 Gy plus 10 - 14 Gy with BT) in 65, 46, and 28 patients, respectively. Dysphagia-free survival (Dy-PFS) was defined as the time to worsening of dysphagia for at least one point, a new loco-regional failure or death of any cause.

Results: Median follow-up time was 6 months (range 0.57-6.0 months). Subjective symptom relief was achieved in 72 % of patients with median response duration of 5 months. The 1-year survival rate was 30%. The 6-months Dy-PFS time for the whole group was 73 \pm 4%. The 6-months Dy-PFS was 90 \pm 4% after EBRT, 92 \pm 5% after EBRT + BT and 37 \pm 7% after BT, respectively (p<0.001). Five patients lived for more than 2 years, all of them were treated with EBRT \pm BT. Ulceration, fistula and stricture developed in 3, 6 and 7 patients, respectively.

Conclusion: Radiotherapy leads to symptom improvement in the majority of patients with advanced incurable esophageal cancer. The present results favor EBRT ± BT over BT alone. Due to the retrospective nature of this study, imbalances in baseline characteristics might have contributed to this finding, and further trials appear necessary.

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Patterns of recurrence in stage pT3N0M0 thoracic ESCC patients after two-field esophagectomy

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Purpose or Objective: To evaluate patterns of recurrence and identifyits related factors among patients with Stage pT3N0M0 thoracic esophageal squmous cell carcinoma (ESCC) after two-field esophagectomy.

Material and Methods: 249 patients with Stage pT3N0M0 thoracic ESCC after radical esophagectomy administered in 2008 and 2009 were identified and enrolled into this study. There were 171 men and 78 women; median age was 60 years-old(33 - 78). The distributions of tumor sites were 39 in upper-, 166 in middle- and 44 in lower-thoracic segment. The median lesion length was 5 cm with a range of 2 to 12 cm. Among them, there were 98 patients received with surgery alone, 20 with radiotherapy (RT), 110 with chemotherapy alone (CT), and 21 with radiotherapy and chemotherapy (CRT). Their locoregional recurrence (LR) of tumor and distant metastasis (DM) as the endpoints were analyzed.

Results: The overall recurrence rates was 43.4% (108), LR occurred in 23.7%, DM in 10.4%, and combined recurrence in 9.2%, respectively. For 82 patients with LR, there were 15.9%(13/82) recurred in supraclavicular, 87.8% (72/82) in mediastinum, 9.8% (8/82) in upper abdomen. The rate of LR in upper-mediastinal and supraclavicular was 80%(66/82). The rate of LR were 53.8% in upper-, 33.1% in middle- and 13.6% in low-thoracic ESCC, respectively. Multivariate analysis indicate, site of lesion was the independent factors for total recurrence and LR.

Conclusion: The recurrence rate was very high in pT3N0M0 thoracic ESCC patients, LR was the mainly cause and most of it was occurred in supraclavicular and upper-mediastinum. Site of lesion was the mainly factor effected on LR. PORT should be strongly suggest in upper- and recommend in middle-, but not in low-thoracic ESCC.

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Salvage chemoradiation for locoregional recurrences of esophageal cancer after curative treatment

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Purpose or Objective: Locoregional recurrence pattern after curative treatment for patients with esophageal cancer has changed since the introduction of preoperative chemoradiation as standard part of curative treatment. The aim of this study was to determine the outcome of salvage definitive chemoradiation (dCRT) for a locoregional recurrence outside previously irradiated areas.

Material and Methods: We retrospectively reviewed 41 patients treated between January 2005 and December 2014 for locoregional recurrent esophageal cancer outside previously irradiated areas. All patients were treated with external beam radiotherapy (50.4 Gy in 28 fractions) combined with weekly concurrent paclitaxel and carboplatin.

Results: The median follow up period was 30 months (range 1.7-120 months). dCRT was completed according to protocol in 90%. The 1-, 3- and 5-year overall survival rate after treatment for recurrence was 74%, 35% and 30% respectively. The median local recurrence free survival (LRFS) and overall survival (OS) time was 27 and 22 months respectively. Median OS was 14.4 months for squamous cell carcinoma (SCC) and 22.0 months for adenocarcinoma (AC) (p=0.81). Median survival after salvage dCRT for a lymph node recurrence was 48 months versus 14 months for a recurrence at the anastomosis (p= 0.009). Sixteen patients (39%) developed a locoregional recurrence after salvage dCRT, 8 out of 20 SCC and 8 out of 21 AC patients. Only 2 LR after salvage dCRT were solely outfield. In 8 of the 16 LR patients there were synchronous distant metastasis (43%).

Conclusion: Definitive chemoradiation is an effective treatment for recurrent esophageal cancer outside a previously irradiated area, and should be given with a curative intent. This holds true for recurrences of both squamous cell carcinoma and adenocarcinoma. Lymph node recurrences have a markedly better prognosis than recurrences at the anastomotic site. Locoregional failures after salvage treatment occur almost solely infield, at the site of the first recurrence.