

Concurrent chemoradiation for locally advanced oropharyngeal cancer

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Abstract

Purpose: The aim of this study was to assess the survival, pattern of failure, morbidity, and prognostic factors of concurrent chemoradiation for locally advanced oropharyngeal cancer.

Materials and methods: A retrospective survey of patients who underwent chemotherapy and radiation for locally advanced oropharyngeal carcinoma at the Veteran Affairs North Texas Health Care System, Dallas, Tex.

Results: Between December 1999 and September 2004, 48 patients with locally advanced oropharyngeal cancer underwent concurrent chemotherapy and radiation. At a median follow-up of 23 months, the 3- and 5-year survival for the whole group were, respectively, 52% and 41%. Seventeen patients (35%) developed recurrences. There were 12 (25%) locoregional failures (6 local failures alone and 6 local and regional failures). Distant metastases developed in 8 patients (5 alone, 3 associated with locoregional failures). Four patients (8%) developed second primaries. No difference was observed in survival between base of tongue and tonsillar carcinoma ($P = .32$). The 5-year survival for T1-T2 and T3-T4 tumors was, respectively, 84% and 27% ($P = .01$). No patient with T1-T2 tumors developed distant metastases ($P = .04$). Forty-five patients (94%) developed toxicity grade 3 to 4 (40 mucositis and 26 hematological). The median weight loss was 18 lb (range, 0–47 lb). Eight patients (16%) developed aspiration pneumonia during and after treatment. Five patients (10%) died of aspiration (2 during and 3 post treatment). Four patients (8%) developed esophageal strictures requiring repeated dilatations post treatment. Two patients had radionecrosis (1 soft tissue and 1 bone) requiring hyperbaric oxygen. Eighteen patients (37%) had prolonged tube feedings (>3 months) after treatments because of severe dysphagia or aspiration.

Conclusion: Concurrent chemoradiation provided good locoregional control for locally advanced oropharyngeal carcinoma. Patients with small tumors (T1-T2) had excellent survival. The poor prognosis associated with large tumors may be due to the risk of developing distant metastases. Acute and late toxicities remained significant. Aspiration pneumonia and severe dysphagia were the most prevalent complications of the combined modality approach.