

Facial lymph node involvement as a prognostic factor for survival in oral cavity squamous cell carcinoma

Abstract

Objectives: To investigate the incidence of metastasis to facial lymph node (FLN) and clarify its impact on prognosis and survivals in the patients at onset of oral cavity squamous cell carcinoma (OSCC).

Methods:

A retrospective review of 641 patients with OSCC treated with curative surgery (CS) alone or CS+ postoperative radiotherapy (PORT) was performed. According to FLN status, an analysis of clinicopathologic parameters, prognosis and survivals was carried out. With stratified by FLN status, reasonable treatment modality was identified in the low-risk group which was defined as those who had N0-1 disease, negative margin, and no extracapsular nodal spread (ENS).

Results:

FLN involvement was identified in 103 patients (16%), which had statistically significant associations with several established risk factors and negatively affected local control ($P < 0.001$), neck control ($P < 0.001$), and disease specific survival ($P < 0.001$). Compared with CS alone, CS+PORT increase 5-year neck control rate (76.8 vs. 30.7%, $P=0.006$) and disease-specific survival rate (67.8 vs. 30.7%, $P=0.037$) of the OSCC patients with FLN metastasis in low-risk group.

Conclusions:

Metastasis to FLN threaten the disease control and survivals of OSCC patients. PORT minimized the residual risk of involved FLN in low-risk population.

Key Words: Facial lymph node, Oral squamous cell carcinoma, Neck dissection, Surgery, Postoperative radiotherapy.