

Squamous cell carcinoma metastatic to cervical lymph nodes from an unknown primary site: the impact of radiotherapy

Xueguan Lu^{1,2}, Chaosu Hu², Qinghai Ji³, Chunying Shen², and Yan Feng²

¹Department of Radiation Oncology, Second Affiliated Hospital of Soochow University, Suzhou;

²Department of Radiation Oncology, and ³Department of Head & Neck Surgery, Cancer Hospital of Fudan University, Shanghai, China

ABSTRACT

Aims and background. Cervical lymph node metastases of squamous cell carcinoma from an unknown primary site constitute about 5% of the total head and neck cancer cases. The management of these patients is still a therapeutic challenge. The aim of the present study was to analyze the prognosis in a series of patients and, in particular, the impact of different radiotherapy techniques on the prognosis.

Methods and study design. Data from 60 patients with cervical lymph node metastases of squamous cell carcinoma from an unknown primary site were reviewed. Nine of 60 patients (15.0%) received excisional biopsy. Radiotherapy was delivered to the bilateral neck and pharyngeal mucosa (extensive field) in 11 patients (18.3%), to the bilateral neck in 24 patients (40.0%), and to the ipsilateral neck in 25 patients (41.7%). Fourteen patients (23.3%) also received chemotherapy.

Results. The 5-year overall survival rate of all patients was 68.5%. The overall survival of patients with N1, N2, and N3 stage was 100%, 68.0%, and 40.9%, respectively ($P = 0.026$). The overall survival of patients irradiated by ipsilateral neck, bilateral neck, and extensive field was 66.5%, 74.5%, and 54.6%, respectively ($P = 0.5$). At multivariate analysis, only N stage significantly affected overall survival ($P = 0.032$). The 5-year neck control rate of all patients was 65.6%. The neck control rate of patients with N1, N2, and N3 stage was 100%, 63.2%, and 34.6%, respectively ($P = 0.064$). The neck control rate of patients irradiated by ipsilateral neck, bilateral neck, and extensive field was 87.6%, 51.1%, and 72.7%, respectively ($P = 0.279$). Emergence of the occult primary was observed in 21.2% patients, and all of these occurred within the head and neck region. The primary tumor emerged in 23.3% of patients treated with ipsilateral and bilateral neck irradiation and in 12.5% of patients irradiated by extensive field ($P = 0.469$).

Conclusions. Patients with cervical lymph node metastases of squamous cell carcinoma from an unknown primary site have clinical features and a prognosis similar to those of other head and neck malignancies. Extensive irradiation results in a lower trend of emergence of the primary tumor than when patients are treated with ipsilateral and bilateral irradiation, but there is no significant difference in overall survival.

Key words: cervical node metastasis, prognosis, radiotherapy, squamous cell carcinoma, unknown primary.

Correspondence to: Xueguan Lu, Department of Radiation Oncology, Second Affiliated Hospital of Soochow University, 1055 Sanxiang Road, Suzhou 215004, Jiangsu Province, P.R. China.

Tel 86-512-67783430;
fax 86-512-68284303;
e-mail luxueguanok@yahoo.com.cn

Received July 24, 2008;
accepted September 17, 2008.