Treatment of Mediastinal Lymph Node Metastases in Thyroid Carcinoma: A 16-Year Experience in a Single Institution

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Objective: Mediastinal lymph node metastasis is uncommon in thyroid cancers, but can be a life threatening cause. The consequence of radical extirpation must be balanced against the issues of tumor control, survival outcomes, and functional morbidity. The aim of this study was to clarify the clinicopathologic characteristics, treatment outcomes of patients with thyroid carcinoma and mediastinal lymph node metastases.

Methods: Thirty-seven consecutive thyroid cancer patients with mediastinal lymph node metastases between January 1993 and December 2007 were included in this study. All the patients underwent a mediastinal dissection in addition to thyroid cancer surgery. The median follow-up was 60.4 months (range, 14–188 months).

Results: The mean age was 53.2 years, with a male-to-fe-

male ratio of 16:21. Of the 37 patients, 26(70.3%) had papillary cancers, 2(5.4%) follicular cancers, 6(16.2%) medullary cancers, 2(5.4%) Hürthle cell carcinoma, and 1(2.7%) poorly differentiated thyroid carcinoma. The surgical treatment included 6 cases of superior mediastinal lymph nodes dissection, 28 cases of whole mediastinal lymph nodes dissection, and 3 cases of image-guided surgery. Major complications occurred in eight patients, and it included five surgical mortalities. Local recurrences occurred in 15 patients. Of the 32 patients, 21 were alive without disease, and 9 were stable disease status and 2 were dead.

Conclusions: The prognosis for patients with thyroid cancer and mediastinal lymph node metastases can be improved by an aggressive mediastinal node dissection along with appropriate thyroid resection.