

TREATMENT AND PROGNOSTIC FACTORS FOR ADVANCED STAGE THYMIC CARCINOMA

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Purpose : Thymic carcinoma is a rare malignant mediastinal tumor. It is usually found at a late stage and the prognosis is poor. This retrospective study reviewed the treatment results of patients with advanced stage thymic carcinoma and analyzed the prognostic factors.

Materials and Methods : This retrospective study was to analyze 29 patients with advanced thymic carcinoma who received radiotherapy in our hospital between 1992 and 2005. Because of incomplete course of radiotherapy, lost follow-up, or double cancer, five patients were excluded. The treatment modality included external beam radiotherapy, tumor resection or cisplatin-based chemotherapy. Fractionated radiotherapy was given in conventional or 3D conformal techniques. The characteristics of patients, receiving tumor resection, chemotherapy, the dose of radiotherapy in inoperable patients and treatment modality were analyzed to find the prognostic factors for overall survival retrospectively.

Results : The median age was 58 year-old. The median radiotherapy dose of 24 patients was 54.5 Gy. The Karnofsky performance status was 70 for 4 of the patients, and above 80 for the rest. Seven patients received surgical resection, and 9 patients had cisplatin-based chemotherapy. The survival rate was improved by receiving surgical resection significantly in univariate analysis ($p=0.017$) but not by the completeness of tumor resection, the dose of radiotherapy, or chemotherapy. In multivariate analysis of these factors, only receiving surgical resection still remained to improve the survival rate ($p=0.046$). The median overall survival time was 26 months. One-year survival rate was 78.3% and 3-year survival rate was 15.3%. Local recurrence occurred in 5 patients, and the relapse time was from 2 to 49 months. The local control rate of 22 patients at 1 and 2 years was 64.6% and 37.7% respectively.

Conclusion : There is no effective treatment protocol for patients with advanced stage thymic carcinoma. In our study, we found tumor resection as an important prognostic factor in advanced stage thymic carcinoma. For unresectable thymic carcinoma, the roles of radiotherapy and chemotherapy remain ambiguous.

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Key words: Thymic carcinoma, surgery, Radiotherapy, Prognostic factors