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**Prognostic factors and significance of the revised 6th edition of the AJCC classification in patients with locally advanced nasopharyngeal carcinoma.**

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**Source**

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**Abstract**

**PURPOSE:**

To compare the 4th edition 1992 and 6th edition 2002 of the American Joint Committee on Cancer (AJCC) staging systems, to evaluate the paranasopharyngeal structures and lymph node involvement, and to define the prognostic significance of the above factors to overall survival (OS) in patients with locally advanced nasopharyngeal carcinoma (NPC).

**PATIENTS AND METHODS:**

CT images of 162 patients, who were diagnosed with NPC and received irradiation alone or chemotherapy and irradiation, were retrospectively reviewed. CT scans, performed prior to and after the completion of treatment, were reviewed.

**RESULTS:**

The parapharyngeal space was found to be involved very commonly (98%). 50 of 162 patients (31%) displayed parapharyngeal extension of the tumor to degree A, 59 patients (36%) showed degree B, and 50 patients (31%) degree C nasopharyngeal extension. According to the AJCC 6th edition 2002, patients were distributed into stages IIA, IIB, III, IVA, and IVB. By contrast, using the AJCC 4th edition 1992, patients were distributed into stages III and IV only. After a median follow up of 71.1 months, median survival was 60.7 months, with a 2-year survival rate of 71.3% and a 3-year survival rate of 62.2%. Multivariate analysis identified age, degree of parapharyngeal lateral extension, cavernous-sinus-infiltration, and size of infiltrated lymph nodes as independent prognostic factors for OS.

**CONCLUSION:**

The 6th revision of TNM staging reported herein, provides a more uniform distribution of patients between stages. The degree of tumor extension into the parapharyngeal space should be considered in future TNM staging revisions.