

## THE OUTCOME OF POSTOPERATIVE RADIOTHERAPY FOR ADENOID CYSTIC CARCINOMA OF THE HEAD AND NECK

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**Purpose :** To investigate treatment outcome of adenoid cystic carcinoma (ACC) of the head and neck region by surgery plus postoperative radiotherapy.

**Materials and Methods :** From June 1984 to August 2007, a total of 46 patients with ACC of the head and neck were analyzed. There were 23 males and 23 females with a median age of 55 years (range, 16-75). The primary sites included major salivary gland (18), sinonasal region (14), oral cavity (8), lacrimal gland (3), tongue base (2), and larynx (1). The major endpoint was overall survival (OS). The secondary endpoints were local failure-free survival (LFFS), metastasis-free survival (MFS) and cancer-specific survival (CSS).

**Results :** After a median follow-up of 157 months, 24 of 46 patients had tumor relapse (7 local, 1 regional, 2 locoregional, 9 distant, 5 local plus distant). The 5-year rates of LFFS, MFS, OS and CSS were 73.1%, 74.0%, 75.3% and 80.1%, respectively. Univariate analysis revealed that female gender, younger age, early stage, good performance status, major salivary gland location and shorter interval between operation and radiotherapy were favorable prognostic factors for OS ( $P < 0.05$ ). The multivariate analysis revealed that performance status was the only significant prognostic factor that affected overall survival (hazard ratio, 8.47; 95% confidence interval, 1.85-38.64;  $P = 0.006$ ) and cancer-specific survival (hazard ratio, 9.23; 95% confidence interval, 1.63-52.10;  $P = 0.012$ ).

**Conclusion:** The treatment outcomes of surgery plus postoperative radiotherapy for ACC of head and neck region were good with a 5-year overall survival rate of 75.3%. Performance status was the most important and independent prognostic factor.

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Key words: Adenoid cystic carcinoma, Head and neck, Radiotherapy, Surgery

### INTRODUCTION

Adenoid cystic carcinoma (ACC) was first described in the 1850's and named

cylindroma for its classic histological appearance. ACC is a slowly growing but highly malignant tumor that comprises approximately 10 to 15% of salivary gland cancers and 1 to

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