Outcomes of the Neck Managements after Induction Chemotherapy in Advanced Head and Neck Cancer

Department of Otorhinolaryngology-Head and Neck Surgery, Seoul National University Hospital, Seoul, Korea

Soo-youn An*, Woo-Jin Jeong, J. Hun Hah, Tack-Kyun Kwon, Myung-Whun Sung, Kwang Hyun Kim

Objective: To establish the role of pre-radiation neck dissection (pre-RT ND) and concurrent chemoradiation (CCRT) in patients with head & neck squamous cell carcinoma (HN-SCC) undergoing organ preservation treatment.

Methods: We reviewed medical records of 150 patients with histologically confirmed HNSCC in stages III—IV with regional metastasis who underwent induction chemotherapy (IC) at Seoul National University Hospital between January 1999 and April 2008. Among 150 patients, 103 patients who showed complete or partial response in primary tumors after IC and underwent subsequent neck management were enrolled in this study.

Results: Twenty-five patients showed complete response (CR) in the neck and 23 patients of them underwent sequential RT (CR group, n=23). Five-year overall survival rate

and disease free survival rate were 75.6% and 72%, respectively, in CR group. Patients who showed partial response (PR) or no response in the neck underwent sequential RT only (n=30), CCRT (n=26), or pre-RT ND plus RT (n=22). Five-year overall survival rates were 62.4% in RT group, 87.0% in CCRT group, and 66.7% in pre-RT ND plus RT group. Five-year disease free survival rates were 43.1% in RT, 59.9% in CCRT, and 71.5% in pre-RT ND plus RT group. Although there were no significant differences between each groups in overall survival and disease free survival, CCRT and pre-RT ND plus RT groups showed better results over RT group.

Conclusions: CCRT and pre-RT ND plus RT could be a good option for the poor responder to IC in neck management of HNSCC.