

Carcinoma of the External Auditory Canal and the Middle Ear : SNUH Experience

Hyun-Cheol Kang, M.D.,¹⁾ Hong-Gyun Wu, M.D.,¹⁾ Charn Il Park, M.D.,¹⁾
Chong-Sun Kim, M.D.,²⁾ Seung Ha Oh, M.D.²⁾

*Department of Radiation Oncology,¹⁾ Otolaryngology,²⁾ Seoul National University College of Medicine,
Seoul, Korea*

Purpose : To investigate the roles of radiotherapy in treating patients with carcinomas of the external auditory canal and middle ear.

Methods and Materials : A series of 51 patients with histologically confirmed carcinoma who were treated between 1981 and 2007 in our institutions were analyzed. Thirty-nine patients with squamous cell carcinoma (SqCC) and 12 patients with non-squamous cell carcinoma (nine with adenoid cystic carcinoma, 2 with sebaceous carcinoma, 1 with basal cell carcinoma) were treated. The patients treated by radiotherapy alone received 39–70Gy (median 66Gy) in 13–35 fractions. The patients treated with perioperative radiotherapy received 44–70Gy (median 61.2Gy) in 22–37 fractions. Clinical end-points were overall survival, disease-free survival (DFS) and analyzed only for patients with SqCC. The median follow-up was 1.7years (range : 0.2–18.5years).

Results : The 5-year overall survival rate calculated by the Kaplan-Meier method for patients with SqCC was 81%. On multivariate analysis, performance status (ECOG-ps), T-stage (Stell's stage) and disease free status had significant impact on overall survival. The 5-year DFS rate was 64%. Treatment modality was significant factor in DFS on multivariate analysis. Patients treated by radiotherapy alone had lower 5-year DFS rate (38%) compared with the others' (79%) ($p=0.034$). In surgery alone group, all patients had T1 disease and been controlled until last follow up.

Conclusions : For advanced (T2–3) SqCC of the external auditory canal and middle ear, surgery with radiotherapy is the preferred treatment.

KEY WORD : Carcinoma of the ear · Radiotherapy.