

High Dose Radiation Therapy Concurrent with Chemotherapy in Locally Advanced Nasopharynx Cancer

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Purpose : We conducted a prospective treatment protocol of concurrent radiochemotherapy (CRCT) for locally advanced nasopharynx cancer since Apr. 1994 and would report our results.

Materials and Methods : Until May 2001, 52 consecutive locally advanced nasopharynx cancer patients were accrued to this protocol. The median total dose to the primary site, involved node, and uninvolved neck were 72 (64–80) Gy, 61.2 (45–72) Gy, and 45 (18–45) Gy. Boost techniques were 3-dimensional conformal technique in 45, intracavitary brachytherapy in 3, and 2-dimensional multiple small fields in 2 patients. Chemotherapy regimen consisted of 3 cycles of cisplatin (100mg/m², IV) every 3 weeks concurrently during the radiation therapy course, and optional 3 cycles of cisplatin (75mg/m², IV, D1) + 5-fluorouracil (800mg/m², IV, D1-5) every 3 weeks afterward.

Results : The median follow-up period was 32 (1–84) months. The median age of all patients was 48 (29–78) years, and the male to female ratio was 36/16. The histologic types were squamous cell carcinoma in 24 and undifferen-

tiated carcinoma in 28 patients. Stages by the new UICC-TNM staging system (1997) were IIb in 6, III in 23, IVa in 14, and IVb in 9 patients. The planned concurrent chemotherapy was completed in 33 patients (63%). Two patients could not complete the planned radiotherapy. One patient expired due to septic shock during CRCT and another did due to malnutrition during adjuvant chemotherapy. There were 12 treatment failures in 11 patients : 7 locoregional recurrences (2 within and 5 outside the radiation target volume) ; and 5 distant metastases (lung, bone, and liver). Locoregional control, disease-free survival, and overall survival rates were 86.7%, 78.0%, and 92.7% at 3 years, and 81.9%, 73.4%, and 77.6% at 5 years, respectively.

Conclusion : High dose radiation therapy coupled with concurrent chemotherapy is judged to be highly successful in treating patients with locally advanced nasopharynx cancer when compared with the historic data.

KEY WORDS : Nasopharynx cancer · Concurrent radiochemotherapy.