

COMPARISON OF CONCOMITANT CHEMORADIOTHERAPY VS. RADIOTHERAPY ALONE FOR ADVANCED NASOPHARYNGEAL CARCINOMA - PRELIMINARY REPORT OF A RANDOMIZED TRIAL

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Purpose: To compare the effect and toxicity of concomitant chemoradiotherapy (CRT) and radiotherapy alone (RT) for advanced nasopharyngeal carcinoma (NPC).

Materials and Methods: A phase III randomized trial was conducted since December 1993. Patients with previously untreated and pathologic diagnosis of NPC were eligible. These included 1)1992 AJCC stage III/IV; 2)Karnofsky scale > 50%; 3)age < 80 years old; 4)normal liver, renal, and bone marrow function; 5)no distant metastasis; 6)obtaining informed consent. Radiotherapy was administered in both arms with total dose of 70-75 Gy/6-8 weeks using a similar fractionation and technique. The concomitant chemotherapy consisted of cisplatin + 5-FU continuous intravenous infusion during the first and fifth weeks of radiotherapy.

Results: This preliminary analysis included 120 patients who were followed at least 3 years after treatment. It was compatible between the two groups in patients' characteristics. Tumor response were evaluated 2 months after treatment which showed no difference between CRT and RT. Acute toxicity was similar except for leucopenia which occurred more frequently and more severe in CRT arm. But most patients in both arms tolerated the treatment course smoothly. The 4-year primary disease-free, regional disease-free and distant metastasis disease-free survival rates were 91.6% vs. 75.5%, 93.7% vs. 88.8%, and 73.4% vs. 70.7%, respectively in CRT and RT groups. CRT has better local control than RT with a borderline significant difference (P= 0.0753). The 4-year overall survival and progression-free survival rates were 68.6% vs. 53.5% and 70.1% vs. 55.1% respectively, favored CRT groups but the difference was not statistically significant. Distant metastasis was the predominant site of failure in both arms.

Conclusion: Concomitant chemoradiotherapy is better than radiotherapy alone in local control rate for advanced NPC. However, most patients failed at distant site(s). Adequate and effective neoadjuvant or adjuvant chemotherapy before or after radiotherapy to eradicate subclinical micrometastasis should be further consideration.

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