Concurrent Chemoradiotherapy in Patients with Locally Advanced Nasopharyngeal Carcinoma of the Undifferentiated Type

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Abstract

The result with radiotherapy alone in patients with locally advanced nasopharyngeal carcinoma (NPC) was disappointing. Encouraging results have been reported with the use of concurrent chemoradiotherapy in patients with locally advanced squamous cell carcinoma of the head and neck. Hence, we decided to explore the use of this treatment schedule in patients who presented with locally advanced disease (UICC/AJCC classification system).

Between July 1995 and March 1996, 14 patients with locally advanced NPC were treated with the following schedule: radiation therapy was given conventionally to a total of 66 to 70 Gy to both the nasopharynx and neck with or without parapharyngeal/intracavitary boost; chemotherapy consisted of intravenous cisplatin at 20 mg/m²/day and intravenous 5-flurouracil 1000 mg/m²/day, infused over 8 hours on days 1 to 4 during the first and fifth week of radiation therapy. Depending on the patient’s tolerability and clinical assessment of toxicity, a third cycle of chemotherapy was planned 4 to 5 weeks after the second cycle, upon the completion of the radiotherapy.

Twelve patients completed all intended treatment. Two patients failed to do so due to treatment-related mortality. The median follow-up duration was 30 months. Limiting toxicities were myelosuppression and oropharyngeal mucositis. The overall response rate was a 100% at both the primary and nodal sites of disease. The median disease-free survival was 21 months. Forty per cent of the patients were alive at 3 years. This treatment schedule was associated with an unacceptable treatment-related death rate. As a result, this protocol was terminated.

Key words: Concurrent chemoradiotherapy, Nasopharyngeal cancer, Undifferentiated