

DISCUSSION

In developing countries like India, more than 60% of head and neck squamous cell cancers present with advanced disease and carry a poor prognosis which has remained unchanged over the past 30 years. When presenting disease is either inoperable or patients refuse surgical management, role of radiotherapy is limited and remain a challenging problem for the radiation oncologist. With primary radiotherapy given in maximum tolerable doses, locoregional recurrence remains the major pattern of treatment failure. Whether improvement in locoregional control will ultimately be translated to increase survival or not, is a matter of considerable debate⁵.

In patients who have locally advanced and inoperable cancer of the head and neck, the achievement of initial local control (complete response) of the disease with initial definitive treatment with radiotherapy with or without chemotherapy, is an important prognostic factor for overall survival. Complete response was found to be 69% in patients who had received cisplatin 100 mg/m² three weekly concurrently with definitive radiotherapy and the authors of the study concluded that the combination of cisplatin and radiotherapy is an effective and safe treatment in patients with advanced head and neck cancer⁶.

Laboratory data points towards increased radiation sensitivity, particularly under hypoxic conditions when cisplatin is used⁷. Cisplatin has been found to be inhibitive to the repair of sublethal damage.

In our study, where 44.4% of the patients had stage III and 55.5% had stage IV locally advanced cancer, the clinical response was very encouraging. Complete response was achieved in 57.7% of patients with an overall response rate of 88.8% when all the subsites of the head and neck cancer patients were combined. Highest combined response rate was seen in hypopharyngeal cancers where 71.4% achieved such response, lowest response rate was seen in oral cavity group where only 37.5% achieved complete response but overall response rate was 87.5%. Of the 4 patients of nasopharyngeal cancer 2 had complete response and the remaining 2 had partial response (overall response 100%). These two patients were treated with 6 cycles of combination chemotherapy of cisplatin plus 5-fluorouracil to take the complete response to 75%. Among the patients with laryngeal carcinoma, overall response rate was high (94.7%), whereas 63.1% achieved complete response. The patients with partial response were offered surgery but only one patient could be salvaged with such treatment.

Though the use of concurrent chemoradiation in head and neck cancer improves the local control of the tumor but at the cost of markedly increased toxicity due to combined radiotherapy and chemotherapy. Taylor et al⁸ used cisplatin 60 mg/m² and 5-fluorouracil 800 mg/m² in 14-day cycles with conventional radiotherapy. They demonstrated an improved freedom from recurrence in patients treated with chemoradiotherapy compared to induction

chemotherapy. There was, however, an increase in mucositis requiring supportive care in the concurrent group.

A recently completed intergroup study randomized patients with unresectable squamous cell cancers of the head and neck to radiotherapy alone, radiotherapy plus bolus cisplatin, or split course radiotherapy with first and third cycles of cisplatin and 5-fluorouracil. The 2 and 3 year actuarial survival rates were 23% for radiotherapy alone, 35% for radiotherapy plus cisplatin (P=0.016), and 27% for split course radiation plus cisplatin and 5-fluorouracil (P=0.13)⁹. At the time of evaluation of our study, 43 out of 45 (95%) patients were alive with a median survival of 14 months. T and N stage did not significantly affect the survival but it is presumed that appropriate survival analysis is undeserved owing to the early evaluation of results. However, the two patients who died had higher T and N stage.

The use of cisplatin weekly as an outpatient treatment is an extremely attractive schedule from the standpoint of delivery, tolerance, compliance and cost-effectiveness. The radiosensitive effects of cisplatin are evident from both the increase in toxicity as well as complete responses. Mucositis was the predominant toxicity occurring in majority of patients and requiring interruptions in radiotherapy and chemotherapy dose modifications. Concurrent chemoradiotherapy has been proved effective in the management of HNSCC because survived patients offered a good quality of life without any significant financial or cosmetic deficit.

CONCLUSION

Treatment of patients with advanced inoperable head and neck cancers with concurrent weekly cisplatin and conventional external beam radiotherapy is feasible. Mucositis was the most predominant and commonly seen toxicity. While survival data are too early to evaluate, the overall response rate and the high frequency of complete response rates are encouraging.

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I wish to express my gratitude for the help and guidance received from the Members of Board of Trustees and the Central Executive Committee members, of International Medical Sciences Academy, World Headquarters, New Delhi. I am also grateful for the valuable cooperation extended by the members of JIMSA Editorial and Advisory Boards; and also the peer reviewers, for their consistent and continuous effort and support to maintain a high standard of quality of the articles published in the journal.

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