

Comparing laryngeal preservation options

Concurrent administration of chemotherapy and radiotherapy is superior to sequential therapy or radiotherapy alone for laryngeal preservation and locoregional control in patients with stage III or IV laryngeal cancer, report US-based researchers.¹

547 such patients were randomised to receive one of the following three treatment options:

- induction cisplatin plus fluorouracil followed by radiotherapy (n = 173)
- radiotherapy with concurrent administration of cisplatin (172)
- radiotherapy alone.

The primary endpoint was preservation of the larynx.

At a median follow-up of 3.8 years, the rate of laryngeal preservation was significantly higher among patients who received radiotherapy with concurrent cisplatin, compared with those who received induction chemotherapy followed by radiotherapy or radiotherapy alone (84% vs 72% and 67%, respectively). At two years, the rate of locoregional control was significantly better in the radiotherapy and concurrent cisplatin group, compared with induction chemotherapy followed by radiotherapy or the radiotherapy alone regimen (78% vs 61% and 56%, respectively). At two and five years, the rates of distant metastasis and disease-free survival were better in both of the chemotherapy-based regimens than in the radiotherapy alone group; however, overall survival rates were similar in all three groups.

Higher total rates of severe toxic effects (acute and late) occurred in the group that received induction chemotherapy followed by radiotherapy and in the group that received radiotherapy with concurrent cisplatin, compared with the group given radiotherapy alone (81% and 82% vs 61%, respectively).

The researchers advise that *"radiotherapy with concurrent cisplatin should be considered standard care for patients desiring laryngeal preservation whose cancer is within the categories of disease studied in this trial, and laryngectomy should be performed only as salvage therapy"*.

Drs Everett Vokes and Kerstin Stenson from the University of Chicago, US, hope that ongoing investigations into alternative treatment strategies, such as the use of compounds directed against molecular targets known to be relevant to angiogenesis (e.g. epidermal growth factor receptor inhibitors and antiangiogenic agents), *"will lead to further improvements in the rate of survival and the rate of organ preservation among patients with head and neck cancer and offer future patients easier therapy and a better prognosis"*.²

1. Forastiere AA, et al. Concurrent chemotherapy and radiotherapy for organ preservation in advanced laryngeal cancer. *New England Journal of Medicine* 349: 2091-2098, No. 22, 27 Nov 2003.

2. Vokes EE, et al. Therapeutic options for laryngeal cancer. *New England Journal of Medicine* 349: 2087-2089, No. 22, 27 Nov 2003.