

CONCLUSION

The analysis of success and failure in the treatment of squamous cell cancer of the larynx is a difficult task because of the shortcomings of the actual staging system and the general lack of randomised prospective controlled studies. The indication to use the systemic approach of chemotherapy to solve the overwhelmingly local problem of non-advanced glottic cancer should be backed by statistical evidence of increased local control and survival. At the moment, there is no evidence that chemotherapy is a valid alternative to surgery and/or radiotherapy in non-advanced and little evidence in advanced glottic cancer. The patient even risks losing a potentially curative surgical option by tumour progression under chemotherapy. Chemotherapy should be used in well-defined, controlled clinical trials only—the most promising way to confirm potential advantages of chemotherapy in the local and systemic therapy concept of glottic cancer.

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TREATMENT OF head and neck cancer has traditionally been surgery and/or radiotherapy depending on the site and extent of the tumour. Chemotherapy has been reserved for palliation. In recent years, however, in order to improve loco-regional control, organ preservation and survival, induction chemotherapy has also been introduced in the multimodality treatment of head and neck including laryngeal cancers [1–6].

W. Mendenhall and M.A Holtz have expressed their opposing views regarding the impact of chemotherapy as first

and single treatment for glottic cancer. Mendenhall is aware that only a small number of early-stage glottic cancers will be cured with chemotherapy alone, but expects to select by the tumour response potentially radiosensitive, otherwise unfavourable high-volume tumours for successful radiotherapy. Hotz however, argues that glottic cancer can effectively be treated by local therapies, therefore the use of chemotherapy means an insufficient treatment at a considerable cost and systemic side-effects.

Treatment of glottic cancer depends primarily on localisation and stage of the tumour, influenced by preferred treatment traditions originating from geography- and speciality-

derived differences. Over 60% of glottic cancers are discovered at an early (T1, T2) stage, and treated with curative intent using single modality therapies with an organ preservation success rate of 75–97%. Controversy still exists between surgeons [7–13] and radiotherapists [14–17] on the priority of methods. Following either treatment, however, local recurrence remains an important problem especially in T2 diseases [2, 6, 9, 12]. Advanced, resectable glottic cancers can be treated with radical surgery followed by radiotherapy or, in order to preserve the larynx, with radiotherapy first and surgery for salvage [3, 6, 9, 11, 17].

One must also keep in mind when choosing therapy that patients treated successfully for their glottic cancer face an increased incidence (3–5% per year) of developing second primary malignancies in the upper aerodigestive tract. Consequently, repeated treatments in the same region might be necessary in the future life of the patient [18]. The effectiveness of these is one of the most important factors determining survival [15, 19–21]. No data exist regarding the influence of induction chemotherapy on the development and response to therapy of the second primary cancers.

For all of the above-mentioned reasons the search for new, more effective treatment modalities continues. Theoretically, induction chemotherapy has several advantages including: minimal risk of developing drug resistance, reduction of the primary tumour in size, better local control and safer organ preservation, identification of patients with responding lesions as those who might benefit from radiotherapy and treatment of occult metastatic disease [4, 6, 22].

Constant attempts to develop reliable prognostic histological or serum markers regarding the expected biological behaviour, including radio- and chemosensitivity of the tumours have not yet provided satisfying results [23–28].

In the absence of prospective randomised trials in early-stage cases, limited data of the results in advanced cases, and without reliable prognostic markers it is difficult to support either view on the potential benefits of induction chemotherapy in glottic cancer. Results of traditional surgery and radiotherapy, especially in early cases, are relatively good. Therefore, until more proof is found in favour of induction chemotherapy, it should be used according to well-defined protocols only, and in centres of highly developed practice in traditional therapies. The evaluation of results of prospective, randomised clinical trials and the improving biological staging methods of the tumours by new predictive factors will hopefully make it possible to select the right patients for the right treatment modalities in the future.

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