Head and Neck Cancer
Guidelines for Chemotherapy

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Head and neck cancer is estimated to be one of the most prevalent cancers in the world. This tumour type accounts for 5% of all new cancer cases in the US and Europe each year. Patients with locally recurrent or metastatic squamous cell carcinoma of the head and neck have a poor prognosis, with a median duration of survival between 4 and 6 months.

During the past few years, screening for potentially active new compounds, new associations and new modalities of chemotherapy administration have had some degree of success. Clinical investigations have also focused on the addition of chemotherapy to locoregional treatment for patients with locally advanced disease. Induction chemotherapy or concomitant chem- and radiation therapy can result in high response rates, and reduced incidence of distant metastases. However, there is no clear demonstration of any benefit from the addition of chemotherapy to locoregional therapy on overall survival in patients with resectable disease.

In patients with resectable laryngeal or hypopharyngeal cancer, chemotherapy combined with radiotherapy can be considered as a standard treatment option for larynx preservation, keeping total laryngectomy reserved for salvage therapy. In patients with unresectable head and neck cancer, simultaneous chemoradiotherapy has been shown to improve locoregional control and survival, at the cost of greater toxicity. Outside clinical trials, this approach can also be considered as a standard therapy for unresectable disease.

1. Squamous Cell Carcinoma of the Head and Neck

Despite optimal conventional treatment with surgery and/or radiation therapy, patients with advanced head and neck tumours, presenting with large primary tumour or large nodal involvement, have a poor prognosis, with a 5-year survival of ≤30%. Most of these patients die from local recurrences, while 10% develop distant metastases. Ten to 20% of patients develop a second primary tumour, usually in the head and neck area, or in the bronchus or oesophagus.[1,2]

During the past 20 years, chemotherapy of head and neck cancer has undergone intensive evaluation in clinical trials, and important advances have been made in several fields.[3,4] The purpose of this article is to review the role of chemotherapy in the treatment of squamous cell carcinoma of the head and neck. Thyroid carcinoma, salivary gland tumours and tumours of other histological types are excluded. The article discusses current therapeutic guidelines and outlines future expectations.

2. Chemotherapy in the Treatment of Recurrent And/Or Metastatic Head and Neck Cancer

2.1 Clinical Outcomes for Chemotherapy in Recurrent And/Or Metastatic Disease

Treatment remains palliative in patients with recurrent and/or metastatic head and neck cancer. Therefore, the most important outcomes are related to improvement of disease-related symptoms, such as pain, difficulty in swallowing, asthenia, anorexia and weight loss. Chemotherapy can produce transient alleviation of symptoms by inducing tumour shrinkage. However, we must keep in mind that chemotherapy is able to induce adverse effects...