

Comorbidity and prognosis in advanced hypopharyngeal-laryngeal cancer under combined therapy

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ABSTRACT

Aims and background. The success of combined treatment in head and neck cancer resides largely in its completion, which can be compromised when the patient's general health status is precarious. The objective of this investigation was to study the role of comorbidity as a prognostic factor in a large, homogeneous population affected by locally advanced pharyngeal-laryngeal cancer, under a combined protocol treatment. The *a priori* hypothesis is that comorbidity strongly conditions overall survival and specific overall survival in these patients and can aid in the selection and individualization of treatments.

Methods. After a 24-month follow-up, a univariate and multivariate retrospective analysis of survival and prognostic factors was performed using 14 clinical, pathological and molecular variables including the comorbidity index calculated following the Picarillo method. The settings were the Otolaryngology, Oncology and Pathology Departments of the Miguel Servet University Hospital, Zaragoza, Spain, a referral center of the National Health System. Of the original 114 patients selected, 15 were withdrawn because the tumor spread to maxillofacial areas, or due to the lack of attendance at the clinic, incomplete clinical data or coexistent primary tumors. The group under analysis consisted of the 99 remaining patients affected by stage III and IV laryngeal and/or hypopharyngeal cancers that had not received previous treatments. The main outcomes to analyze were overall survival, specific overall survival and relative risk.

Results. Overall survival at 2.5 years was 68.1% (95% CI, 57.7-78.5). Specific overall survival at 2.5 years was 74.8% (95% CI, 64.9-84.6). In the multivariate analysis, tumor staging, neoadjuvant chemotherapy response and comorbidity (RR = 1.55 and 1.44 for overall and specific overall survival, respectively) present themselves as three prognostic factors independent of overall and specific overall survival.

Conclusions. The role of comorbidity as an independent prognostic factor in patients affected by laryngeal and/or hypopharyngeal cancer treated with chemo-radiotherapy should be taken into account in the tailoring of treatments and the improvement of therapeutic results.

Key words: comorbidity, hypopharyngeal cancer, laryngeal cancer, prognostic factors.

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