Trends in net survival from head and neck cancer in six European Latin countries: results from the SUDCAN population-based study

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The aim of the SUDCAN collaborative study was to compare the trends in 1- and 5-year net survival and the trends in the dynamics of the excess mortality rates in head and neck cancers between six European Latin countries (Belgium, France, Italy, Portugal, Spain and Switzerland). The data were extracted from the EUROCARE-5 database. First, the net survival was studied over the 2000–2004 period using the Pohar-Perme estimator. For trend analyses, the study period was specific to each country. The results are reported from 1992 to 2004 in France, Italy, Spain and Switzerland and from 2000 to 2004 in Belgium and Portugal. The analyses were carried out using a flexible excess rate modelling. There were significant differences between countries in 5-year age-standardized net survivals over the 2000–2004 period, ranging from 33 to 34% in France and Portugal from 42 to 44% in Switzerland and Italy, respectively. The age-standardized net survival improved considerably from 1992 to 2004 in Italy, Spain and Switzerland, but not in France because of lack of improvement in the elderly. The increase in net survival was linked to a decrease in the excess mortality rate up to 3–4 years after diagnosis. The net survival from head and neck cancers improved over the study period, but significant differences were still observed in 2004. Differences in sex ratio and anatomical distribution contributed only partially towards these disparities. Differences in stage at diagnosis, time to treatment and/or proportion of human papillomavirus-related cases are also probably involved in the survival disparities observed. Overall, the prognosis of these tumours remains poor. \textit{European Journal of Cancer Prevention} 25:S16–S23 Copyright © 2016 Wolters Kluwer Health, Inc. All rights reserved.


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Introduction

The SUDCAN study aims at comparing cancer net survivals between Belgium, France, Italy, Portugal, Spain and Switzerland. In these countries, the age-standardized (world) incidence for head and neck cancers ranged in 2012 between 7.2 (Italy) and 20.9 (Portugal) per 100 000 person-years in men and between 2.9 (Italy) and 5.6 (France) per 100 000 person-years in women (Ferlay et al., 2013). The European mean age-standardized 5-year relative survival from these cancers in the EUROCARE-5 study was 40%, but varied with cancer topography, which is not homogeneous between countries (De Angelis et al., 2014). Overall, head and neck cancers are relatively uncommon (especially in women), but their prognosis is poor mainly because of advanced stages at diagnosis and delay in treatment (Chen et al., 2008; Belcher et al., 2014; van Harten et al., 2015).

Since the 1990s, the management of head and neck cancers has improved with the use of concurrent chemoradiation (Pignon et al., 2009) and, more recently, but to a lesser extent, with the use of targeted therapies. Advances in the overall care of the patients, including nutritional support, also contributed towards improvement in the outcomes.

For meaningful survival comparisons between countries or time periods, a reliable indicator is needed. Net survival from cancer is the survival that would be observed if directional survival analysis.