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Review

A systematic review examining factors influencing health related quality of life among melanoma cancer survivors

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Abstract Eighty percent of melanomas are diagnosed at a localised stage, when they are highly curable. Their survival rate induces long follow-up periods, transforming melanoma into a chronic disease and patients' health-related quality of life (HRQoL). Understanding which patient characteristics are associated with poor HRQoL should allow a more personalised management of their HRQoL. Hence, we propose a systematic review for this purpose.

Systematic literature searches were performed in three different electronic databases: PubMed, Web of Science and the Cochrane Library. Only studies published in English after 2005 until June 2016 and exploring HRQoL over a period of at least one year were considered.

10 articles were identified from seven different studies, representing a total of 4246 patients. All were observational: six were cross-sectional and only one was prospective. Several patient characteristics associated with HRQoL were identified. Women tend to have lower psychological HRQoL than men. Age was generally associated with variations in HRQoL levels, but there was no consistency across studies. Positive associations between marital status or social interactions and psychological subscales were highlighted by a few studies. Finally, the stage related severity of prognosis at initial diagnosis was systematically associated with worse HRQoL levels (either psychological, physical or global).

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Several patient characteristics could be identified in melanoma studies that were associated with HRQoL levels. However, these relations were not consistent across studies. Such findings highlight the current lack of empirical data available. Further evidence is needed on HRQoL factors in melanoma survivors.

1. Introduction

Melanoma is the eighth most common cancer in the developed countries in the world [1,2]. About 55,000 deaths in 2012 have been estimated to be caused by melanoma. In European countries, melanoma incidence rose from 6.0 to 11.1 per 100,000 from 2000 to 2012 [3–5]. In the same period, mortality rate remained roughly stable, about 2.3 per 100,000, possibly reflecting the effects of early recognition. Primary melanoma treatment has not changed much during this period (surgery—with or without sentinel lymph node resection—still being the primary treatment of most melanomas even if new treatments have been approved for metastatic melanoma recently [6,7]). More than 80% of melanomas are actually diagnosed at a localised stage, when they are highly curable [6,8,9]. Such an early diagnosis makes melanoma one of the malignancies with the higher 5-year survival rates: its 5-year relative survival rate is 91%, rising to 98% for patients with localised melanoma [2]. Thus, follow-up periods of medical monitoring can be very long for verifying the absence of disease recurrence, transforming melanoma in a chronic, life-threatening disease [10,11]. Appropriated lifestyle practices including strict protection measures against sun and ultra-violet exposure are required, possibly leading to significant repercussions on both personal and social lifestyle [12]. A melanoma diagnosis may then considerably impact patients' lives, especially their health-related quality of life (HRQoL). As HRQoL encompasses all the aspects of quality of life that can be clearly shown to affect health—either physical or mental, it can be 'affected in a complex way by both the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment' [13]. Local surgical excision is the treatment of choice for more than 70% of the patients. Thus, the melanoma impact on HRQoL should be mostly determined by the psychological experience of being diagnosed with cancer, the surgery and the remaining scars. The scars may constitute a permanent reminder of the individual's cancer experience. Hence, the psychological issues that face the melanoma survivors should be mostly specific, significantly differing from other types of cancer characterised by long-term side effects of systemic treatment or radiotherapy.

The treatment and management of psychological support and HRQoL remains to be improved for melanoma patients. Even if more than 85% of melanoma patients deem that the medical monitoring during the follow-up was worthwhile, they also indicate that little attention was paid to their well-being during this period [14]. Knowing the determinants of a poor HRQoL among such patients should allow personalising and then improving the HRQoL management by identifying the most vulnerable patients. The objective of this review is to identify, to evaluate and to summarise the possible factors influencing HRQoL among melanoma survivors.

2. Method

We performed the review according to the recommendations of the PRISMA statement for reporting systematic reviews and meta-analyses of studies [15].

2.1. Literature search strategy

To identify studies assessing the determinants of HRQoL among melanoma survivors, systematic searches were performed in January 2016 in three different electronic databases : PubMed, Web of Science and the Cochrane Library. Studies published after January 2005 and in English language journals were considered. The following combinations of MeSH terms and text words were used (melanoma* or 'skin cancer') and ('quality of life' or 'patient reported outcome*' or 'health-related') and (survivor* or 'survival analysis') not ('non-melanoma' or 'nonmelanoma' or 'non melanoma'). Reference lists of included articles were also studied for identifying any other trials. We also spoke to key experts to ensure that all key studies were included.

2.2. Inclusion and exclusion criteria

Studies that met the following criteria were included: (i) subjects with a diagnosis of melanoma, (ii) survivorship after diagnosis longer than 12 months, (iii) HRQoL evaluated using self-assessment questionnaires, (iv) HRQoL analysed as an end-point and explained by patient characteristics and (v) clinical trials or epidemiological studies (prospective observational, cohort, cross-sectional or retrospective). Studies were excluded