Who Detects Skin Cancer? Factors Associated With the Suspicion of Malignancy in Patients With Skin Tumors

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Introduction

Early diagnosis of skin cancer is associated with a reduction in morbidity/mortality and in treatment costs [1]. The benefits of screening programs (especially for melanoma), however, have not been conclusively demonstrated.

Methods

During this 6-month-long, observational study, data were prospectively collected in the dermatology department of a university hospital. Patients included in the study had a pathology-confirmed diagnosis of basal cell carcinoma, squamous cell carcinoma, melanoma, or keratoacanthoma. Those who suffered from cognitive decline or loss of sensory perception that impeded their noticing a skin tumor were excluded. The data collected included risk factors for skin cancer, personal and family background regarding skin tumors, sunburn events, phototype (I/II), multiple atypical nevi, whether the patient had undergone solid organ transplantation, and demographic data. Information was also collected on who first noticed the lesion: the patient, a family member or some other person, a dermatologist, or a doctor specializing in another field.

Results

The study population totaled 184 patients, 12 of whom had 2 skin malignancies. The most commonly detected was basal cell carcinoma (60.7%, 119 tumors), followed by melanoma (19.4%, 38), squamous cell carcinoma (17.4%, 34), and keratoacanthoma (2.5%, 5). Tumor duration had 2 main peaks, one at 6-12 months (25%) and one at more than 24 months (26%). Figure 1 shows the risk factors detected. The patient was the first to detect the lesion in 54.3% of cases (100/184 patients), someone in the patient’s environment was first in 15.2% of cases (28/184 patients), a dermatologist in 22.3% of cases (41/184 patients), and a doctor speciali-
izing in another area in 8.2% of cases (15/184 patients). Patients who had had a previous skin tumor were more likely to be the first to have detected their present tumor. Having undergone solid organ transplantation was also significantly associated with the tumor being first detected by a dermatologist. No association was seen between who first identified the lesion and age, family background of skin cancer, sunburn events, the presence of multiple atypical nevi, phenotype, or tumor duration.

Discussion

The present self-detection rate of this study is similar to those reported for melanoma in other publications [1]. Graells and Ojeda reported 42% of patients with a second basal cell or squamous cell carcinoma to be the first to detect it [2]. Our results confirm that the knowledge gained from previous episodes of skin cancer increases the likelihood of self-detection. On the other hand, patients who have undergone solid organ transplantation are at greater risk of developing skin cancer; the present results show dermatologists are more likely to be the first to detect skin malignancies in such patients, likely as a result of the monitoring protocols established. Strategies are in place in Western countries for such follow-up by dermatologists. However, no prospective clinical trials have been performed to determine what the best follow-up strategy might be. Diagnosis was delayed more than 2 years in 26% of the present patients. This delay is associated with greater morbidity/mortality and higher treatment costs, justifying efforts to detect problems earlier.

Figure 1. Risk factors for development of skin cancer detected in the patients.

RISK FACTORS

References
