

Palpebral malignant tumors in the Albanian population

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Abstract

Aim: Palpebral malignant tumors constitute an important challenge in the clinical practice. The aim of this study was to describe the distribution of palpebral malignant tumors in the Albanian population.

Methods: A case-series study was conducted during 2011-2014 including 1200 patients (674 men and 526 women; mean age: 53±9 years) with ophthalmological disorders who showed up at the Ophthalmology Service of the University Hospital Center “Mother Teresa” in Tirana. The differentiation of benign from malignant tumors was possible without biopsy in most of the cases. Surface characteristics were identified – smooth, irregular, or crusting – in addition to color and type of edge. However, several cases with tumors required histopathology for diagnosis.

Results: Overall, 156 (13%) patients were diagnosed with palpebral malignant tumors, compared with 1044 (87%) patients with other ophthalmological disorders. Of 156 patients diagnosed with palpebral malignant tumors, 110 (70.5%) of them had basal cell carcinoma, 23 (14.7%) had squamous cell carcinoma, 15 (9.6%) had adipose gland palpebral carcinoma, whereas 8 (5.1%) patients had other types of malignant tumors.

Conclusion: Our study informs about the distribution of palpebral malignant tumors in the Albanian patients with ophthalmological disorders. Future studies should be conducted in Albania in order to confirm and expand these findings.

Keywords: malignant tumors, ophthalmology, palpebral tumors.

Introduction

Palpebral malignant tumors represent an important challenge in the clinical practice (1-5). Recent evidence suggests that palpebral malignant tumors constitute from 5% to 10% of the overall skin cancer (6). Furthermore, palpebral malignant tumors comprise about 1.4% of the overall cancers (7).

The available international literature reports different figures regarding the palpebral malignant tumors. From this perspective, according to several studies, the proportion of palpebral malignant tumors varies from 11% to 44% (8,9), with a fourfold variation between different studies. Such discrepancies between different studies conducted in various countries may be explained by the different clinical characteristics of the study populations including the presence of inflammatory conditions or palpebral lesions (10,11). On the other hand, some other studies have included other malignant tumors besides the palpebral tumors (12,13).

Palpebral malignant tumors usually affect the age-group between 40 years and 60 years (10). However, a study including individuals aged 45-92 years old, reported a mean age of 62.5 years among patients with palpebral malignant tumors (14). The prevalence of palpebral malignant tumors increases with age compared with the other types of skin tumors (15). However, the highest incidence of palpebral malignant tumors has been reported between the ages of 70 years to 79 years (16).

Regarding the sex-differences, the literature reports that palpebral malignant tumors affect males slightly more than females, with a ratio of 1.3/1 (17). Furthermore, the incidence of basal cell carcinoma is significantly higher in men than in women (17).

The information about Albania is very scarce, to date. As a matter of fact, so far, there are no scientific reports informing about the incidence or

the prevalence of palpebral malignant tumors in the Albanian population. In this context, the aim of this study was to describe the distribution of palpebral malignant tumors in the population of Albania, a country located in the Western Balkans which until 1990 was the most isolated communist country in Europe.

Methods

A case-series study was conducted during 2011-2014 including 1200 patients (674 men and 526 women; mean age: 53 ± 9 years) with ophthalmological disorders who showed up at the Ophthalmology Service of the University Hospital Center "Mother Teresa" in Tirana.

For all patients, a general examination of the eyelids and facial skin in a good balanced light was performed. The differentiation of benign from malignant tumors was possible without biopsy in most of the cases.

In most of the patients, a surface examination with magnification was conducted, with a strong hand lens. Surface characteristics were identified – smooth, irregular, or crusting – in addition to color and type of edge. However, several cases with tumors required histopathology for diagnosis.

Results

Overall, 56.2% of the patients were males, whereas 43.8% of the patients were females. About 70% of the patients (N=839) had a middle educational attainment, and 66% of them (N=789) reported an average income level (data not shown).

On the whole, of 1200 participants included in this study, 156 (13%) patients were diagnosed with palpebral malignant tumors, compared with 1044 (87%) patients with other ophthalmological disorders. These findings are presented in Figure 1.

Figure 1. The prevalence of palpebral malignant tumors in a sample of patients with ophthalmological disorders in Albania (N=1200)

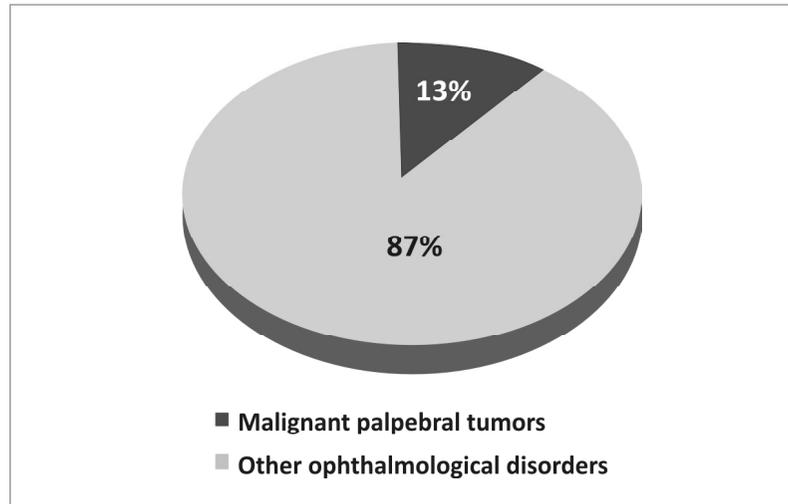
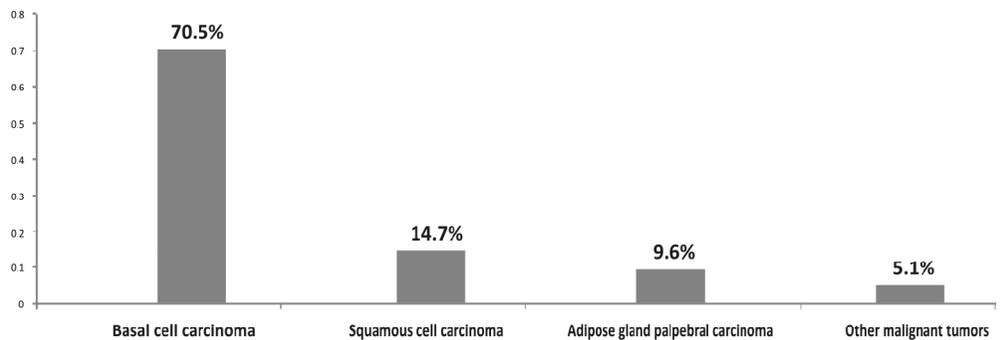


Figure 2 presents the distribution of different types of palpebral malignant tumors in the study population. Of 156 patients diagnosed with palpebral malignant tumors, 110 (70.5%) of them

had basal cell carcinoma, 23 (14.7%) had squamous cell carcinoma, 15 (9.6%) had adipose gland palpebral carcinoma, whereas 8 (5.1%) patients had other types of malignant tumors (Figure 2).

Figure 2. Distribution of different types of palpebral malignant tumors among patients (N=156)



Discussion

Our study provides useful evidence about the distribution of palpebral malignant tumors in the Albanian population. This is one of the very few reports on this topic in this transitional society which is currently experiencing a rapid political and economic transformation.

Palpebral tumors constitute an important share of skin tumors in general and eye tumors in particular

(1-3). Ophthalmologists and surgeons face enormous challenges which are related not only to the surgery of the tumor itself, but also with regard to the esthetic issues (4,5).

Benign tumors are usually manifested in the first two decades of life, but they can also appear among children aged one year old (11).

On the other hand, 10-year studies conducted from

1990 to 2000 concluded that the four most common types of tumors of palpebra consist of epidermoid cysts, dermoid cysts, squamous cell papilloma and mixed marks in the skin (18). These findings were confirmed by histopathology. On the other hand, according to a very long-term study conducted from 1950 to 1990, vascular tumors were reported as the most frequent type of tumor, followed by neural tumors, and next by the dermoid cysts, squamous cell papilloma and mixed marks in the skin, which were all confirmed by histopathology findings (11).

In our study we obtained evidence of basal cell carcinoma as the most frequent type of palpebral malignant tumor, followed by squamous cell carcinoma and next by adipose gland palpebral carcinoma. Finally, only about 5% of the patients had other types of malignant tumors in this sample

of Albanian patients.

Our findings related to the frequency of basal cell carcinoma are in line with other studies from the international literature, which report that this condition is the most common type of palpebral tumors. Hence, basal cell carcinoma constitutes 38% of palpebral tumors and 72% of tumor-like lesions (10). Furthermore, basal cell carcinoma comprises 21% of benign tumors and 37% of malignant tumors (12).

In conclusion, our study informs about the distribution of palpebral malignant tumors in the Albanian patients with ophthalmological disorders. Our findings could be used to foster and promote the routine clinical practice in Albania. Nevertheless, future studies should be conducted in Albania in order to confirm and expand these findings.

Conflicts of interest: None declared.

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