

A clinicopathologic review of skin cancers in Sari in north-east of Iran (1996-2006)

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Citation

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Abstract

Skin cancer is the most common types of cancer in Caucasians. The true incidence of skin cancer is difficult to measure exactly. Define the frequency and characteristics of skin cancers in patients biopsied at Sari Booali Hospital in the northern east of Iran. This descriptive study was carried out in all histopathologically proven cases of skin cancer, reported during the years 1996 through 2006. Information regarding tumor type, age, gender and anatomical location were collected. From 2110 biopsies, 187 skin cancers were diagnosed. Including 128 (68.45) basal cell carcinomas (BCC), 43 (23%) SCC, 6(3.3%) malignant melanoma and 10 (5.4%) other tumors. The head and face were the most common sites of BCC and SCC. In Sari, sun-related skin cancers have relatively low incidences and a rather stable pattern.

INTRODUCTION

Skin cancers rates vary greatly around the world. It is the most common and the most curable of all cancers. The incidence of skin cancer is increasing rapidly, primarily because of increased recreational exposure to Ultraviolet (uv) light and increased longevity. There are 3 main types of skin cancers: Basal cell Carcinoma, and Squamous cell carcinoma and melanoma. However, there are less common neoplasms such as Kaposi's sarcoma, Paget's disease of breast, Merckel cell carcinoma and lymphoproliferate disorders. [2]

The most important risk for the development of skin cancer is exposure to the ultraviolet (uv) component of sunlight. The incidence of BCC and SCC is directly related to the length and intensity of exposure to sunlight.

Race and ethnic group are very important factors among individuals with fair skin, light eyes, red or blond hair and who sunburn easily and tan poorly are at much great risk for development of skin cancer. Sari is located in the north of Iran, with temperate weather in 9 months in the year. The region has about 500000 population with "mainly Fitzpatrick type IV" skin phenotype. This retrospective study aimed to investigate sun-related skin cancers in the north of Iran since 1996 till 2006 to determine their frequency and characteristics, and to compare these findings with those

from other areas of the world.

METHODS

This descriptive cross-sectional study was carried out on 2110 biopsied patients in the department of dermatology of Booali hospital in Sari, since 1996 till 2006. Skin cancer was diagnosed by a dermatopathologist using standard criteria. The necessary information was collected from the patient's files and pathologic archives.

RESULTS

A total of 187 cases of malignant skin tumors were reported during the study time. BCC was the most common skin cancer (68.45%) and SCC is the second one (23%). The results were shown in the table-1.

Figure 1

Table 1: frequency of malignant skin tumors in biopsied patient

Tumor	Number	%
Basal cell carcinoma	128	68.45
Squamous cell carcinoma	43	23
Malignant melanoma	6	3.2
Paget's Disease of breast	3	1.6
Mycosis fungoides	2	1
Sebaceous carcinoma	1	0.53
Dermatofibrosarcoma protuberans	1	0.53
Malignant fibrohistiocytoma	1	0.53
Malignant nerve sheet tumor	1	0.53
Leiomyosarcoma	1	0.53
Total	187	100

The age range of patients was 17-95 years with median 60.8 years. The male/female ratio was 1.1. Farming with 58.4% frequency was the most common occupation of patients (table 2).

Figure 2

Table 2: frequency of occupation of patients with skin cancer

Occupation	number	%
Farmer	109	58.4
Housewife women	36	19.24
worker	17	9
Office staff	6	3.2
other	19	10.16
total	187	100

93% of Bcc and 48.8 % of SCC occurred on head and face (Graf 1 and 2), 48% of skin cancers represented as nodular lesions (table 3).

Figure 3

Figure 1: frequency of location of basal cell carcinoma

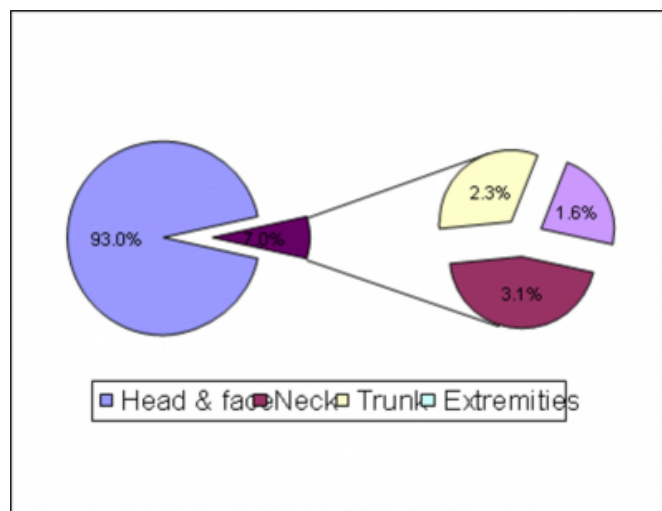


Figure 4

Figure 2: frequency of location of squamoul cell carcinoma

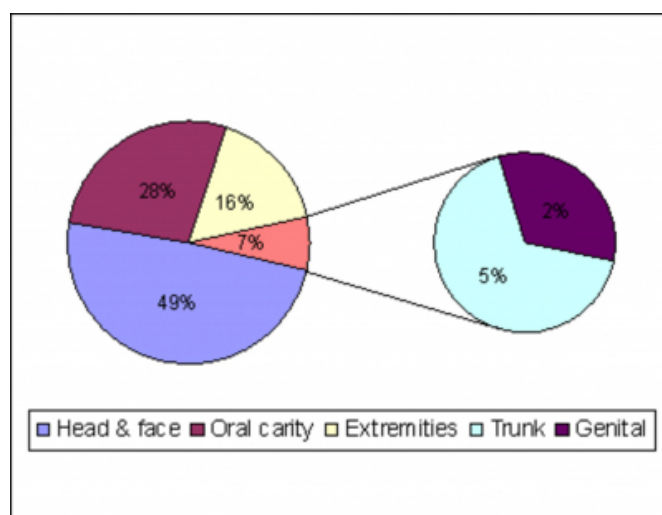


Figure 5

Table 3: frequency of clinical feature of skin cancer

Features	Number	%
Nodule	90	48
Plaque	33	18.2
Tumor	30	16
Ulcer	25	13.4
Patch	10	5.4
total	187	100

DISCUSSION

Skin cancers are the commonest types of cancer in Caucasians [4, 5]. Their incidence shows considerable geographic racial variation [6]. There was no recorded data

on clinicopathologic features of skin cancers in this region.

The incidence of non melanoma skin cancers (BCC and SCC) is more than three times that of other cancer in Australia and is higher than that of any other cancer in the USA [7, 8]. In our study non melanoma skin cancers is more than ten times that of other cancer. Our study like other series documented BCC was the most common skin cancer (68.45%). In this study the ratio of BCC to SCC was 2.97 like other study [9] other skin cancers such as malignant melanoma, pagets disease, Mf and etc with lower frequency were also seen. SCC is three times more prevalent in men than in women in the USA [10], in our study there was no meaningful gender difference in non-melanoma skin cancer frequency, but malignant melanoma was two times frequent in men than females. This may be partly, due to in this region many of rural women were farmer and longer exposure to sunlight.

Like other study the age range of patients was 17-95 years with an average age 60.8 years [11, 12]. Our study showed that non melanoma skin cancer (BCC and SCC) were the commonest malignancy of skin, because the most common occupation of our patients was farming and the most common site of BCC and SCC were sun exposed area, on head and neck we concluded UV radiation exposure was the most important predisposing factor for these malignancy in this region, there for we recommend appropriate sun protection to prevent occurring these malignancy.

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