

MALIGNANT SKIN TUMOURS IN MISURATA CANCER CENTRE DURING 2011 - 2014

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ABSTRACT

Skin cancer is a common malignancy worldwide. Non-melanoma skin cancer (NMSC) is the most common cancer affecting white individuals and Caucasian populations. Melanoma represents 4% of all new cancers whereas incidence of non-melanoma skin cancer (NMSC) is nearly equal to that of all non-cutaneous cancers in United States of America. The development of NMSC, including both squamous and basal cell carcinomas is related to ultraviolet light (UV). Alternatively, etiology of melanoma is either due to genetic defects (familial melanoma) or interactions of low-penetrance genes and UV (sporadic melanoma). Malignant tumor able to invade the surrounding tissues and/or metastasize to other parts of the body. Light skin, hair and eye colors, family and personal history of skin cancer, certain types and a large number of moles and people with history of sunburn early in life (as in case of malignant melanoma) are at high risk of skin cancer. This study is aimed to identify epidemiological features of skin cancer in Misurata Cancer Center during 2011- 2014. Total number of cases were 195, out of them 44 (22.5%) cases with malignant skin tumour, basal cell carcinoma 17 (38.6%) cases, squamous cell carcinoma 20 (45.5%) cases, malignant melanoma 3 (6.8%) cases, dermatofibrosarcoma 4 (9%) cases and one (2.3%) case with metastatic skin cancer from a primary in the breast. Early diagnosis and accurate and up-to-date records on skin tumors are necessary for quantification of changes in its incidence to allow for research and planning of services.

KEYWORDS: Malignant skin tumour, Patient age and gender, Site of tumour.

INTRODUCTION

Skin cancer is a common malignancy worldwide. Non-melanoma skin cancer (NMSC) is the most common cancer affecting white individuals and Caucasian populations, and incidence rates are increasing. Melanoma represents 4% of all new cancers whereas incidence of non-melanoma skin cancer (NMSC) is nearly equal to that of all non-cutaneous cancers in United States of America. Three main types of skin cancer are basal cell carcinoma (BCC) which is the commonest skin cancer, locally invasive carcinoma of the basal layer of the epidermis, 30% multiple, metastatic rate is 0.0028%, M:F approximately 2:1, Common sites are in the region above a line drawn between the corner of the mouth and the lobe of the ear (75% occur in the head and neck)^(1,2).

Squamous cell carcinoma (SCC) is a malignant tumour of the epidermis in which the cells ((if differentiated)) show keratin formation. 5% of SCCs metastasise, in men the common sites are ears & scalp and in women more in the lower limbs, but in both sexes involving back of hands & face.

Malignant melanoma (M.M) is a malignant tumour of epidermal melanocytes, Spread occurs via superficial lymphatics to give satellite lesions, to regional lymph nodes via deep lymphatics, and via haematogenous spread^(3,4).

Malignant melanomas undergo two growth phases radial and vertical which is a poor prognostic sign M.M May be found when a pre-existing mole shows

a new black area, texture changes, itching, oozing, or bleeding.

AIM AND OBJECTIVES OF THE STUDY

This study aims to identify the epidemiological features of skin cancer.

METHODS AND SUBJECTS

A retrospective study of patients following the Plastic and Dermatology out-patient department (with skin lesions who admitted and managed in Plastic surgery department) in Misurata Cancer Center was conducted.

All histopathologically proven cases of skin cancer reported during the years 2011 through 2014 were retrieved and reviewed. Information regarding tumour type, age, gender, and anatomical location were collected and results had been compared with other similar studies.

RESULTS

Total number of cases was 195, 44 out of them with malignant skin tumours, basal cell carcinoma 17 cases, squamous cell carcinoma 20 cases, malignant melanoma 3 cases, dermatofibrosarcoma 3 cases and one case with metastatic skin cancer from a primary in breast (figures 1 and 2).

Basal cell carcinoma:

Number of cases with basal cell carcinoma are 17. Ten cases were males (59%) and 7 cases females (41%), the mean of patient age 70 years. The most common sites are nose (45%), scalp (30%), cheek (25%), respectively. Histopathology reports showed free resection lines for all. See (figures 3, 4) and (photos 1, 2 and 3).

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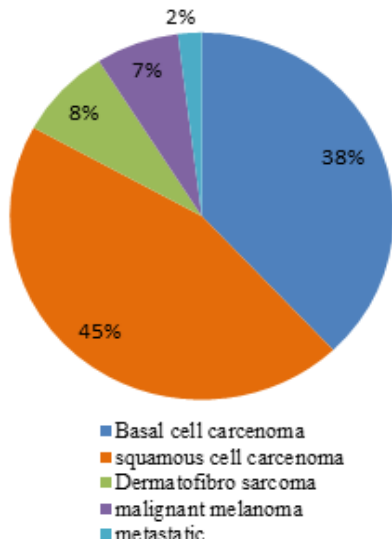
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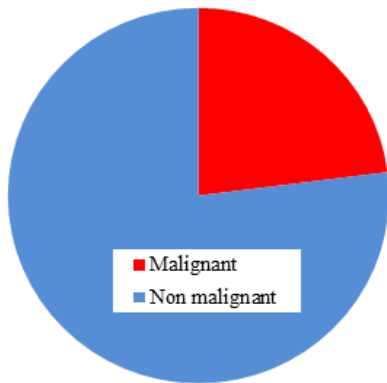
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Squamous cell carcinoma (scc):

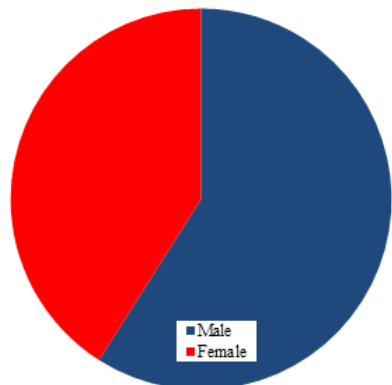
20 cases was showing scc, 14 cases males (70%) and 6 cases females (30%). The mean age is 60 years. The most common sites are: scalp, ears and limbs respectively. Histopathology reports of six cases revealed that the resection margins were involved, (figures 5, 6) and (photos 4, 5).



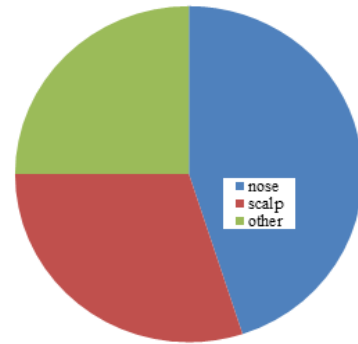
(Figure 1) Distribution of malignant skin tumours



(Figure 2) Distribution of malignant to non-malignant cases



(Figure 3) Sex distribution of BCC cases



(Figure 4) Site distribution of BCC cases



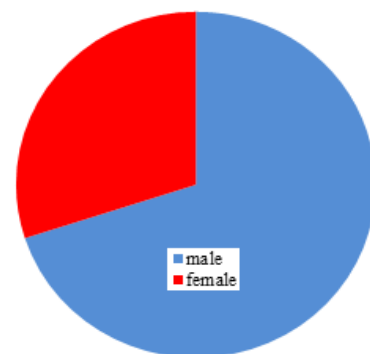
(Photo 1) BCC right inner canthus pre & post-operative



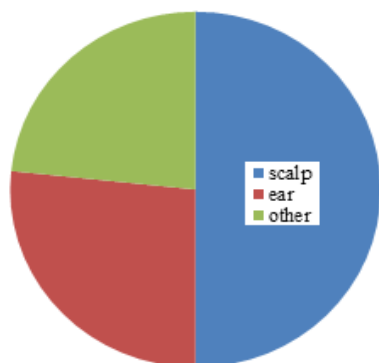
(photo 2) BCC left ala nasi pre & post-operative



(Photo 3) BCC right zygomatic area pre & post-operative



(Figure 5) Sex distribution of SCC cases



(Figure 6) Site distribution of SCC



(Photo 4) SCC right ear pinna pre & post-operative



(Photo 5) SCC scalp pre & post-operative

Metastatic skin lesion:

One case is female patient 30- year old shows metastatic skin nodule because of advanced breast cancer.

Malignant melanoma:

3 cases, female- gender with mean age 45 years, diagnosed as malignant melanoma . 2 cases in lower limbs and one in anal margin, two of them re-excised , because of not enough excisional margin.

Dermatofibrosarcoma:

4 cases, 2 females and 2 males , the mean age was 35 years . All of them presented with mass in the thigh and diagnosed as dermatofibrosarcoma 2 cases were recurrent), one case was re-operated because of involved resection margin . (photo 6).



(Photo 6) Dermatofibrosarcoma right thigh

DISCUSSION AND CONCLUSION

About 23% of total cases with skin lesions managed in MCC were malignant , mainly SCC and BCC.

Male gender affected more with SCC & BCC while M.M is more in females, and the same incidence in both gender with dermatofibrosarcoma.

The SCC and BCC were more common in old age group of patients (60 to 80 years) and the M.M and dermatofibrosarcoma were involving more younger age of cases (between 30-50 years).

Nose, scalp and ears are the sites of BCC and SCC, while the limbs are the sites of M.M and dermatofibrosarcoma.

High number of cases re-operated because of involved resection line (because of lack of Mohs surgery in our centre).

In contrast to studies performed in other countries gender and age distribution and anatomical sites involved are similar but SCC cases (45.45%) exceeding the number of BCC (38.63%) in our study and that is may be related mainly to the awareness of referral doctor regarding site of involvement and clinical presentation suggestive of SCC; then dermatofibrosarcoma protuberance (9.09%) and M.M (6.8%), while in Tunisia BCC was the most frequent type (57.5%) followed by SCC (32.6%) then the M.M (4%)⁽⁵⁾. Also, in Southwestern Saudi Arabia, in northern Jordan and in Hyatabad (Peshawar) the most common skin cancers seen are BCC (41%), (52.9%), (32%) and SCC (29%), (26.4%), (18%) respectively followed by Kaposi's sarcoma (18%) then melanoma (4.1%) in Saudi Arabia and Melanoma (11.39%) in Jordan and Melanoma (10%). Mycosis Fungoides (9%) and then Actinic keratosis, Kaposi's sarcoma, Bowen's disease, Dermatofibroma, Atypical fibroxanthoma constituted the remaining in Hyatabad (Peshawar) study^(6,7,8).

In Bahrain study: The histological types of skin cancer in the Bahraini group were as follows (50%) patients with BCC, (31.3%) with SCC, (5%) with dermatofibrosarcoma, (4.2%) with melanomas, (4%) with lymphomas, and (5.5%) with other tumours⁽⁹⁾.

In Singhabour, the commonest skin cancer was BCC (36.5%), followed by SCC (24.4%), Bowen's disease (16.7%), and mycosis fungoides (9.0%). Malignant melanomas were rare (2.7%)⁽¹⁰⁾. In other hand malignant melanoma was the most common dermatological malignancy in north-western Tanzania (67.5%) which were acral and referred as chronic ulcers followed by Kaposi's sarcoma (10.4%), Squamous cell carcinoma (8.4%) and Basal cell carcinoma (7.8%) . The lower limbs were the most frequent site involved accounting for 55.8% of cases⁽¹¹⁾.

In Germany similar to other European countries superficial spreading melanoma was the most frequent clinical type (39.1%). The tumours were predominantly located on the trunk in men (46.8%) in contrast to leg and hip in women (39.5%). For NMSC,

More than 80% of all cases were basal cell carcinomas⁽¹²⁾.

In our country, sun-related skin cancers have relatively high frequency and a rather stable pattern, compared with other areas with similar climate and skin phenotypes therefore increased awareness by dermatologists, general practitioners and the population can influence the detection of tumors that would have passed unnoticed before. Public health campaigns can also contribute.

RECOMENDATIONS

Early diagnosis and accurate and up-to-date records on skin tumors are necessary for quantification of changes in its incidence to allow for research and planning of services.

Increased awareness of population to avoid outdoor activities during the middle of the day and to seek shade and to protect the skin as possible as they can. We are in great need of better documentation of cancer cases in Libya and the national tumor registry should be established.

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