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# NON MELANOMA SKIN CANCER TRENDS IN TRIPOLI / LIBYA

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# Abstract

**Introduction:** The incidence of skin cancer is increasing at an alarming rate. Non melanoma skin cancer (NMSC) is the most common cancer affecting white individuals. Skin Cancer registration in Northern Africa is still limited and, until now, there have been no population-based data available for Libya. We perform the first epidemiological analysis of non melanoma skin cancer (NMSC) in Tripoli/ Libya during 5years period between 2006-2010.

Aim: To discuss current epidemiologic data concerning incidence and demographic variation. To compare our findings with those of published reports from other regions.

**Material and Methods:** All histopathologically proven cases of (NMSC) reported during the years 2006 through 2010 were retrieved and reviewed. 70% of the data were electronically stored. Information regarding tumor type, age, gender, and anatomical location were collected. **Results:** A total of 579 cases of (NMSC) were diagnosed between the years 2006 and 2010. Basal cell carcinoma (BCC) was the commonest type, representing 76.9% of all skin cancers. Males were more frequently affected than female.

**Conclusions:** We concluded that (NMSC) in Tripoli/Libya is not uncommon problem. Ascertainment of NMSC should improve since the advent and use of electronic pathology data. Ongoing increases in age-adjusted incidence, combined with ageing of the population, will have major implications for the clinical workload associated with (NMSC) for the foreseeable future.

Key words: Non melanoma skin cancer; Basal cell cancer; squamous skin cancer; cancer registry

Abbriviation: Nonmelanoma skin cancer (NMSC)

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# Introduction

Nonmelanoma skin cancer (NMSC) is one of the most common malignant cancer in Caucasian populations around the world, and usually refers to either basal cell carcinoma (BCC) or squamous cell carcinoma (SCC) [1].

Epidemiologic studies of these tumours have been limited by the fact that most patients are usually seen and treated in private clinics.

The primary source of data is usually from cancer registries, yet in Tripoli /Libya there is no cancer registry. In Benghazi they established cancer registry on 2003 however information about (NMSC) was limited [2].

There are considerable geographic and racial variations [3]. The

incidence of (NMSC) is highest in Australia [4], Finland BCC is the second most common type of cancer [5].

In Jordan which is a Middle Eastern country, it is the sixth most common type of cancer in males and the fourth most common type in females [6].

We report the frequency and pattern of NMSC in Tripoli /Libya between 2006-2010, a country with a total population of around 1,5 million. The report is based on the data-analysis of all histological confirmed skin cancers. The results are compared to those obtained from the other countries with regard to frequency, sex distribution, anatomical location, histological types.

#### Methods

All histopathologically proven cases of (NMSC) reported during the years 2006 through 2010, were retrieved and reviewed.70% of the data was electronically stored. Information regarding tumor type, age, gender, and anatomical location were collected. The study was performed at main Tripoli / Libya teaching Hospitals: Tripoli medical center, Tripoli Central hospital, Burn and plastic Hospital and Beer Usta Milad dermatology hospital.

#### Results

A total of 579 cases of (NMSC) were diagnosed between the years 2006 and 2010. On 2006 there were just under 80 case



Figure 1. Reported cases per year.

reported, this number doubled on 2007 to around 160 case with no clear explanation, thereafter the number reported reduced to 100 cases per year in the last 2years of the study (Fig. 1)

Basal cell carcinoma (BCC) was the commonest type, representing 76.9% of all skin cancer. Nodular BCC was the commonest clinical and histopatholgical type (Fig. 2)

Males were more frequently affected than females; Male represented 61.5% of all (NMSC). The incidence of both BCC and SCC increased with age. The median age at onset was 70 years (Fig. 3).

The head and neck region was the commonest site affected by both types of cancer. With >70% of the documented site were at the face and scalp area.



Figure 2. Histological confirmed cases.



Figure 3. Median age of onset.

## Discussion

The total number of our reported cases was more than twice the number in similar study done in Egypt the study duration was for 15 years (1989–2004) and they report a 241 cases [7].

In Algeria (1993–1997), PubMed age-standardised incidence for NMSC was eight per 100,000 in men and three per 100,000 in women [8].

In northern Jordan, 34 per 100,000 in men and 29 per 100,000 in women [6].

We could not calculate age-standardised incidence rates; however our frequency revealed a higher incidence than Egypt, Algeria and Jordan. The high risk of second and further tumours in patients with NMSC can increase the sensation of epidemic. It must be remembered that only the first occurrence of each histologically different subtype of NMSC must be reported in registers [9].

Increased awareness by dermatologists, general practitioners and the population can influence the detection of tumours that would have passed unnoticed before. Public health campaigns can also contribute. Recent evidence suggesting that almost all clinically diagnosed NMSCs in hospitals are verified histologically, coupled with the increasing availability of electronic histopathology data, raises the possibility that Cancer registry in Tripoli/Libya can establish.

## Conclussion

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.

Increased awareness, better registration, ageing of the population

and diagnosis of multiple tumors can give the impression of a higher increase in cases than there really is. Accurate and upto-date records on (NMSC) are necessary for quantification of changes in its incidence to allow for research and planning of services.

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