

Clinico-Epidemiological Analysis of Skin Cancer

A HAMEED SHAHARYAR M CHAUDHRY G SARWAR

Department of Radiotherapy and Oncology, Mayo Hospital, Lahore

Correspondence to :Dr. Abdul Hameed

The objective of study is to analyze the clinico-epidemiological parameters of skin cancer. The record of 160 patients was analysed for various parameters. The disease has incidence of 3.48% of all cancer, male to female ratio being 1.6:1. Squamous cell carcinoma was the most common histopathology. Mostly patients with 51-60 years of age (31.25%) were affected. 45.62% of patients were found to be exposed to sun rays. 47.5% and 38.75% presented with nodular swelling and ulceration respectively. The main etiological factor was sun rays followed by trauma and burn scar. Head and neck was the commonest site involved (72.5%). It is concluded that the skin cancer is one of the common malignancy.

Key Words: Skin cancer, sunrays, burn scar.

The skin cancer is one of the commonest tumour in the world. The estimated incidence in USA is between 900,000 to 1200,000 cases annually. The overwhelming majority of skin malignancies are either BCC or SCC. The incidence of BCC and SCC are higher in men than women. Cancer was found to be common on left side of face who drive automobile in USA and on right side in UK reflecting sun exposure. Incidence of the skin malignancy is higher in persons with fair skin, light eyes and hair and who tend to sunburn easily¹.

Aetiology of skin cancer is multi-factorial; ionizing radiation, chemical carcinogens, burn scars, ulcerations and predisposing genetic factors all may be responsible. The most important by far is the solar radiation^{2,3,4}. Solar keratosis is pre-cancerous condition developing into cancer⁵. Patients treated with radiation for benign lesions may develop malignancy later on⁶. Chronic arsenic exposure may cause the disease. Skin cancers occurring in burns and trauma are usually SCC⁷. Patients with Xeroderma Pigmentosa and Basal Naveus syndrome may have these lesions. SCC and BCC are frequently discovered in immunosuppressed patients⁸⁻⁹. The aims and objective of the study is to analyse the clinico-epidemiological data of patients.

Patients And Methods

This study was carried out in 160 patients treated during the years 1992-98 at the Radiotherapy and Department of Oncology, Mayo Hospital, Lahore affiliated with KEMC. Records of the patients was randomly picked and analysed for various parameters keeping in view the clinical epidemiology of the disease. Patients with proven histopathology, having age 10-90 years and with no other malignancy were included. Patients without biopsy, having second malignancy and ages below 10 and above 90 years were excluded from the study.

Results

Total patients treated during the period were 4604 out of which skin cancer were 160 giving the incidence of

3.48% of total malignancies. Out of total 160 patients one hundred (62.5%) were resident of rural area and other 60 patients (37.5%) belonged to urban areas.

Table 1: Occupation (Male & Patients)

Occupation	Total	%age
Farmers	36	36.7
Peons	11	11.2
Labourer	9	9.18
Forces	7	7.14
Postmen	5	5.1
Others	30	30.61

Table 2 Duration of symptoms

Group	Period	Total	%age
A	0-1 year	84	52.5
B	2-5 years	48	30
C	6-10 years	16	10
D	>10 years	12	7.5

Table 3: Risk factors

Risk factors	Total	%age
Sun rays	81	50.62
Trauma	21	13.12
Burns	10	6.25
Genetics	8	5
Chemical	2	1.25
Unknown	38	23.75

Table 4: Clinical presentation

Features	Total	%age
Nodular swelling	76	47.5
Ulcer	62	38.75
Thickening	6	3.75
Discharge	4	2.5
Itching	6	3.75
Mole	6	3.75

Table 5: Site of the tumour

Site	Total	%age
Eyelid/Canthi	37	23.12
Nose	28	17.5
Lower limb	24	15
Scalp	14	8.75
Ear	12	7.5
Cheek	11	6.87
Lip	9	5.62
Upper limb	9	5.62
Chest wall	7	4.37
Forehead	5	3.12
Whole body	2	1.25
Penis	1	0.625
L. Majora	1	0.625

Discussion:

The data of the patients was analysed and compared with other studies. As far age is concerned the patients presented in later age groups in all the Swiss studies¹³. However younger age group was found in an Australian study¹⁴. In our study 45.64% of patients were in the age 51-70 years i.e. later age group was affected. Males are affected more than females; ratio in Queens Land study is 2:1¹⁵ which is approximately similar to our study(1.6:1). Histologically SCC is nearly equal to BCC in the current study ,in studies abroad BCC is more common than SCC even triple in rate in Queensland. Out of 98 male patients 74.5 % had an occupation, which exposed them to sun rays the single most common etiological factor in causation of the disease in all the studies. 50.62% of patients in total had this etiological factor. It included the women who were living in rural areas and could be affected by sun rays as they work in the fields. Other factors were trauma (13.12%) burn scars (6.25%). Risk

factors could not be found in 23.75% of the cases due to incomplete histories.

Most of the patients were presented late. 52.5% of patients had duration of symptom ranging from six months to one year. It could be due to the ignorance of the medical professional and general public about the disease and its early detection.

47.5% and 38.75% of patients presented with nodular swelling and ulceration, both the commonest mode of presentation in all the studies.

Head and neck is the most common site for skin cancer. In Swiss studies this site was involved in 61-81% and in our study 72.5% of the cases. This area is supposed to be exposed mostly to the sun rays.

It is concluded that skin cancer is common malignancy in the world and in this part of the country. Its incidence is going to increase due to depletion of ozone layer and atomic test explosion.

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