

PATTERN OF MALIGNANT TUMORS OF SKIN AT LARKANA

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ABSTRACT: A retrospective study of 228 cases of malignant skin tumors, reported at Chandka Medical College Hospital (CMCH), Larkana, and Larkana Institute of Nuclear Medicine and Radiotherapy (LINAR), during the period of 8 years from January, 1991 to December, 1998 is presented. During this period, maximum number of cases were reported in 1994. Out of 228 cases, 146 (64.03 %) cases were male with the mean age of 56.36 years and 82 (35.96 %) with mean age 56.62 years were female. Male to female ratio was 1.8:1. Eldest patient was 90 years old having banal cell carcinoma and the youngest was of 34 years having squamous cell carcinoma in our study. Various tumors, according to frequency found, were basal cell carcinoma in 140 cases (61.49 %) with the mean age of 60.25 ± 10.21 years, squamous cell carcinoma in 78 cases (34.2 %) with mean age 54.87 ± 16.10 years and malignant melanoma in 10 cases (4.4%) with mean age of $49.00 \pm 16.10 \pm$ years. Maximum number of cases, i.e., 82 (36.0 %) belonged to Larkana district, followed by 26 cases (11.4 %) of Shikarpur and 22 cases (9.4 %) of Khairpur Mir's. Among all, 154 (67.5%) cases involved face, 26 (11.4%) cases upper and lower limbs and 24 (10.5%) cases trunk. Most of the patients i.e 136 cases (59.64%) were farmers by occupation. 118 cases (56.14%) presented with ulcer and 110 cases (48.24%) with nodule and it is concluded that basal cell carcinoma is the most common malignant skin tumor in our area.

KEY WORDS: Skin Tumor Malignant Carcinoma Basal cell Squamous cells melanoma

INTRODUCTION

There are many malignant tumors which can involve the skin of any part of body, but the common tumors frequently seen are the basal cell carcinoma, squamous cell carcinoma and malignant melanoma. The incidence of malignant melanoma of the skin is rising in the white population worldwide and the mortality from this tumor is on the increase. It is assumed that this trend would also continue in the coming years.¹⁻⁴ Basal cell carcinoma has been reported as the commonest of the malignant skin tumors.^{2,5-8} There is a worldwide increase in incidence of all form of skin cancers as a result of sun exposure.^{2,9,11,15} It has been seen that mutation of tumor suppressor gene P53 is often found in non melanoma skin cancer and pre-invasive lesions like actinic keratosis. The type of mutations, detected in P53 gene, strongly indicate ultraviolet light as the initiating and promoting agent in the skin cancer development.⁸ It has been found that malignant skin tumors are more common in fair skinned races as compared to dark skinned counterparts living in the same area.¹²

As there is no accurate data published on malignant skin tumors from this part of our country, therefore, this topic was selected to collect proper data and analyze the pattern of malignant skin tumors for documentation.

MATERIALS AND METHODS

This was a retrospective study in which the records of patients presenting with malignant skin tumors at Chandka Medical College Hospital, Larkana and Larkana Institute of Nuclear Medicine and Radiotherapy (LINAR) during the

period of 8 years from January, 1991 to December, 1998 was analyzed.

These institutions cater patients from upper Sindh, adjacent areas of Balochistan and lower Punjab. A specially-designed proforma was used to fill information of all these patients which included the age, sex, occupation, presentation, site of disease and type of tumor cell etc. Diagnosis of the tumors was made on the basis of clinical presentation and histopathological examination

RESULTS

Two hundred and fifty-two patients presented with malignant skin tumors during the study period. Twenty-four patients were excluded from the study due to incomplete information. Thus, the results for remaining 228 patients were analyzed. During the period of study a mean number of 28 patients of malignant skin tumor presented per year. Out of 228 cases, 146 (64.03 %) were males with mean age of 56.38 years and 82 (35.96 %) cases were females with mean age of 56.62 years. Male to female ratio was 1.8 :1. Eldest patient in our study was of 90 years having basal cell carcinoma and youngest one of 34 years having squamous cell carcinoma. Mean age for basal cell carcinoma was found to be 60.25 ± 10.21 years, for squamous cell carcinoma 54.87 ± 16.10 years and for malignant melanoma 49.00 ± 16.10 years.

In our study the tumors according to frequency found were, basal cell carcinoma, squamous cell carcinoma and malignant melanoma (table I).

The occupation-wise distribution of malignant tumor cases is given in table II.

The district-wise distribution of all the 228 cases of malignant tumors is shown in table III.

Basal cell carcinoma affected the skin of face in the majority of cases followed by scalp and neck, upper and lower limbs, and trunk, while squamous cell carcinoma involved face in

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Diagnosis	Male	Female	Total
Basal cell Carcinoma	94	46	140 (61.4%)
Squamous cell Carcinoma	44	34	78 (34.2%)
Malignant Melanoma	8	2	10 (4.4%)
Total	146 (64.4%)	82 (35.96%)	228 (100%)

Diagnosis	Occupation					Total
	Business man	Farmer	Govt. Servant	House-wife	Land-Lord	
Basal cell Carcinoma	10 4.4%	100 43.9%	5 3.57%	16 33.3%	9 9.6%	140 61.4%
Squamous cell Carcinoma	4 1.8%	32 14%	6 2.6%	30 13.2%	6 2.6%	78 34.2%
Malignant Melanoma	2 0.9%	4 1.8%	-	-	4	10 4.4%
	16 8.0%	136 59.64%	11 4.82%	46 20.17%	19 8.33%	228 100%

S.No	District /Area	No of cases	%
1.	Larkana	82	36.0
2.	Shikarpur	26	11.4
3.	Khairpur Mir's	22	09.6
4.	Jacobabad	18	07.9
5.	Dadu	16	07.0
6.	Sukkur	16	07.0
7.	Naseerabad	12	05.3
	(Balochistan)		
8.	Ghotki	12	05.3
9.	Jafferabad	06	02.6
10.	Nawabshah	04	01.8
11.	Dera Mured		
	Jamali	02	00.9
12.	Dera Bugti	02	00.9
13.	Karachi	02	00.9
14.	Mirpur Khas	02	00.9
15.	Jhal Pat	02	00.9
16.	Jhal Magsi	02	00.9
17.	Quetta	02	00.9
		228 Cases	100%

maximum followed by trunk, scalp and neck. Malignant melanoma affected trunk and limbs (Table No IV).

S.No.	Diagnosis	Face	SITE			Total No of cases
			Scalp & Neck	Upper & Trunk Lower Limbs		
1.	Basal cell Carcinoma	82 (36.0%)	22 (9.6%)	22 (9.6%)	14 (6.1%)	140 (61.4%)
2.	Squamous Cell carcinoma	72 (31.6%)	02 (0.9%)	-	4 (1.8%)	78 (34.2%)
3.	Malignant Melanoma	-	-	4 (1.8%)	6 (2.6%)	10 (4.4%)
		154 (67.5%)	24 (10.5%)	26 (11.4%)	24 (10.5%)	228 (100%)

The clinical presentation of malignant skin tumors in all the 228 cases is given in table V.

Diagnosis	Nodules	Ulcer	Total No. of cases
Basal cell Carcinoma	52 cases (37.1%)	88 cases (62.9%)	140 cases (100%)
Squamous cell Carcinoma	42 cases (53.8%)	36 cases (46.2%)	78 cases (100%)
Malignant Melanoma	6 cases (60.0%)	4 cases (40.0%)	10 cases (100%)
Total	100 cases (43.85%)	128 cases (56.14%)	228 cases (100%)

DISCUSSION

The most common tumor in our study was found to be the basal cell carcinoma followed by squamous cell carcinoma, this pattern has also been reported by various authors worldwide.^{2,5-7} There is an increase in incidence of basal cell carcinoma and skin cancer in various countries where sunlight act as important causative factor.^{10,16} Basal cell and squamous carcinoma are more common on head and neck. Same observation has also been noted by Siddiqui from Karachi.¹² In our study, male to female ratio was 1.8:1, which is more or less close to ratio of 1.6:1 reported in the study from Karachi. The most affected patients in our series were farmers by occupation. This may be due to frequent and continuous exposure of their skin to sunlight. According to Ishihara, apart from exposure to sunlight, other factors like radiation damage, Burn, scars, chronic inflammation etc. should also be considered as high risk group for skin malignant tumors.⁸

Patients with squamous cell carcinoma of skin are at increased risk to develop new primary cancer especially in skin.¹¹ Although, basal cell carcinoma is a most common skin tumor but it rarely affects the skin of penis in males, that are best treated by excisional biopsy.⁶ Other rare disease seen mainly in elderly women is the squamous cell carcinoma of vulvas, which should be considered as skin tumor, the detection of which is possible at an early stage.¹²

CONCLUSION

After the analysis of 228 cases of malignant tumors of skin it was concluded that Basal cell carcinoma is the most common malignant tumor of skin followed by Squamous cell Carcinoma and malignant melanoma in our part of the country.

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