

Skin Cancer in Varanasi

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CANCER of the skin is one of the commonest human neoplasm in white races, the incidence being 20% in males and 11% in females in U. S. A. and 25% in Indonesia. Similar incidence has been observed in U. K., France, Switzerland and Australia (Paymaster 1964, Chakravorty and Duttachoudhary 1968 and Budhraja et al 1972). The incidence is somehow lower in India and varies from 2–9% (Budhraja et al 1972).

Material and method

The present work is based on the observations on 100 cases of skin cancer seen in Plastic Surgery Unit of S. S. Hospital, Banaras Hindu University, over a period of three years. Among all the cancers of body the overall incidence of skin cancer was observed to be 2%. In this group cancers around mucocutaneous junctions, around eyelids, the anterior nares, oral cavity, glans penis and vulval and anal orifices were not included. Diagnosis of all these cases was confirmed by histology.

Observations

Table 1 shows the various types of skin cancer observed in this series.

Epithelioma of the skin was commonest cancer (61%) observed in this series. Peak age incidence for Epithelioma of skin was in 5th and 6th decade whereas that for Basal cell carcinoma was 7th decade. Melanoma and Dermatofibrosarcoma pro-

Table 1
Varieties of skin cancers.

Type of Lesion	Percentage Incidence
Epithelioma (Spontaneous)	36%
Epithelioma (Induced)	25%
Basal cell carcinoma	24%
Melanoma	10%
Dermatofibrosarcoma protuberans	5%

Table 2
Sex distribution of skin cancer.

Type of Lesion	Total	Male	Female
Epithelioma (Spontaneous)	36	26	10
Epithelioma (Induced)	25	17	8
Basal cell Carcinoma	24	18	6
Melanoma	10	8	2
Dermatofibrosarcoma protuberans	5	3	2
Total	100	72	28

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tuberans were observed mostly in 5th and 4th decade respectively, 12% cases were males whereas only 28% were females. Table 2 shows sex distribution in various types of skin cancer. History of predisposing factor which could possibly lead to cancer of skin in these cases was recorded but in 66% of cases we could not find any definite factor. 26% had chronic scar leading to scar cancer, 3% were albinos. 3% were suffering from xeroderma pigmentosum and 2 cases had preexisting mole changing into melanoma. Among 36 cases of spontaneous squamous cell carcinoma 7 had over scalp (Fig. 1). 8 over foot, 7 over trunk and 14 over other parts of the body (Fig. 2) whereas in induced squamous cell carcinoma about 50% developed around joints (Fig. 3). There was no case of scar



Fig. 1—Epithelioma of scalp.

cancer over head and neck region. The average lag period for scar cancer was 17 years. Among 24 cases of Basal cell carci-

noma 12 had lesion over skin of cheek, 5 over nose (Fig. 4 and 5). 3 over forehead and 1 each over eyelid, pinna, back and arm. Basal cell carcinoma of back and arm was seen in albinos. Out of 10 cases of



Fig. 2—Epithelioma of leg.

malignant melanoma 4 was over trunk, 4 over foot (Fig. 6) and 1 each over thigh and upper limb. There was no case of malignant melanoma over head and neck. Site for 5 cases of dermatofibrosarcoma protuberans was back in 3 cases, abdominal wall in 1 and axilla in 1 case. The incidence of clinical lymphnode metastasis at initial examination is shown in Table 3.

Table 3

Nodal metastasis at initial examination in skin cancer.

Squamous cell carcinoma (Spontaneous)	5.5%
Squamous cell carcinoma (Induced)	4.0%
Basal Cell carcinoma	Nil
Malignant melanoma	40.0%
Dermatofibrosarcoma protuberans	Nil



Fig. 3. Squamous cell carcinoma around elbow in a chronic Burn scar.

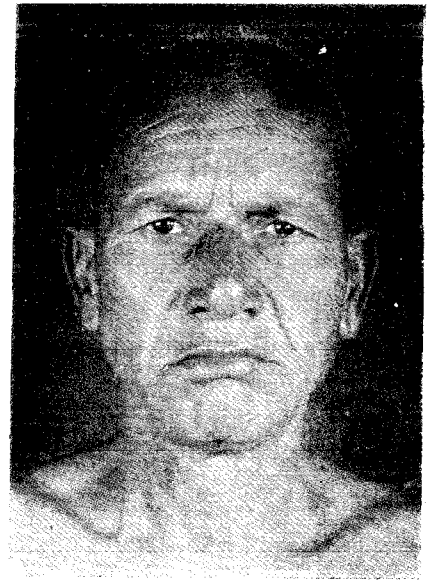


Fig. 4. Basal cell carcinoma at the root of nose.



Fig. 5. Basal cell carcinoma of nose.



Fig. 6. Melanoma of foot.

Discussion

The incidence of skin cancer in India as compared with western countries is quite low. Our findings of 2% incidence of skin cancer correspond with the figures of other workers from India (Paymaster 1964 et al 1972). The incidence of epithelioma of skin is quite high (61%) as compared with basal cell carcinoma (24%) and melanoma 10%. The incidence of induced epithelioma is also quite high as compared with western countries where the incidence of basal cell carcinoma and melanoma is higher than our country. Multiplicity of lesions is commonly seen in patients with precancerous conditions like albinism and xeroderma pigmentosum. Induced epithelioma are commonly seen in the scar around joints in the areas of chronic irritation. In the scar malignant change occurs usually after many years and the average lag period observed in our series is 17 years. The lag period observed by other workers also varied from 24.8 years (Budhraj et al 1972) to 32 years (Lawrence 1952). Basal cell carcinoma is commonly seen over face. In present series there was one case of basal cell carcinoma of back and one over the arm. Both these patients were albinos. Malignant degeneration of skin in albinos depends upon areas of chronic irritation as well as actinic exposure.

The lower incidence of melanoma in India has been observed by other workers also (Reddy, Ganpathy and Reddy, 1954; Sampat and Sirsat 1966).

In present series there were 5 cases of dermatofibrosarcoma protuberans. This tumour is characterised by slow growth, notorious for recurrence, seldom metastasises and has got characteristic histological appearance.

The lymph node metastasis is quite early in cases of melanoma that is why in a small series of 10 cases of melanoma there was clinical lymph node metastasis in 4 cases. In basal cell carcinoma and dermatofibrosarcoma protuberans the lymph node metastasis is quite rare. They are locally malignant tumours.

Summary

In present study 100 cases of skin cancer over a period of three years have been studied. Diagnosis of each lesion is confirmed by histology. Incidence of epithelioma of skin is much more as compared with basal cell carcinoma and melanoma. Various sites of these tumours are also noted. Lymph node metastasis is quite early in cases of melanoma.

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REFERENCES

1. Budhraj, S. N., Pillai, V. C. V., Periyannayagam, W. J., Kaushik, S. P. and Bedi, B. M. S. : Malignant neoplasm of the skin in Pondicherry. *Ind. J. Cancer.* 9:284, 1972.

2. Chakravarty, R. C.,
Duttachoudhury, R. : Malignant neoplasms of the skin in Eastern India. Ind. J. Cancer, 5 : 133, 1968.
3. Lawrence, E. A. : Carcinoma arising in scars of thermal burns with special reference to the influence of the age of the burn on the length of the induction, Surg. Gynaec. and Obstet., 95 : 579, 1952.
4. Paymaster, J. C. : Cancer and its distribution in India, Cancer, 17 : 1026, 1964.
5. Reddy, D. B., Ganpathy, M. N.
and Reddy, D. J. : Malignant melanoma and allied tumours, Ind. J. Surg., 16 : 308, 1954.
6. Sampat, M. B. and Sirsat, M. V. : Malignant melanoma of the skin and mucous membrane in Indians, Ind. J. Cancer, 3 : 228, 1966.