

“BASAL CELL CARCINOMA AND RECONSTRUCTIVE SURGERY”

(A Study of 150 Cases)

By

*Dr. R. G. Yadav, M. S. (General Surgery),

&

**Dr. B. S. Chandalia, M. S. (General Surgery), M. S. (Plastic Surgery),

Introduction :

The basal cell carcinoma is currently treated in several different ways. The method chosen usually depends on the clinical orientation or discipline of the physician or surgeon involved. Accordingly surgeon excises the lesion and repairs the defect surgically. Dermatologists curette or electrofulgrate them and radiotherapists irradiate them-

Surgical removal and repair is rarely contraindicated by the size, location or number of lesions of their clinical subtype (Lever, 1967).

150 cases of head and neck basal cell carcinoma were studied over a period from 1975 to 1979 in the Department of Plastic Surgery, S. M. S. Medical College Hospital, Jaipur.

Cases were treated by surgical excision and plastic reconstruction of defects or radiotherapy or combined radiotherapy and surgery.

Observations

There were 84 males (56%) and 66 females (44%). Previous reports correlate the greater frequency in males (Churchill Davidson; Johnson, 1954; Hayes, 1962) all cases were from coloured races.

Age ranged from 32-84 years. Peak incidence was in the sixth decade. The age difference between male and female was not markedly significant.

Male were 84 (55.5%), Female were 66 (44.5%).

Table I

S. No.	Age (in years)	Male	Female	Total	Percentage
1.	30-39	4	2	6	4.00%
2.	40-49	8	5	13	8.66%
3.	50-59	31	24	55	36.66%
4.	60-69	28	21	49	32.66%
5.	70-79	9	11	20	13.33%
6.	80-89	4	3	7	4.66%

* B-22, Rajapark, Near A.V.M. School, Jaipur - 302004 INDIA.

** Prof. & Head, Deptt. of Plastic Surgery S.M.S. Medical College and Hospital, Jaipur - 202004 INDIA.

Forty four cases were secondary and had recurred after previous treatment (table II).

Table II

S. No.	Past History of	No. of Patients	Percentage
1.	Curette	20	45
2.	Radiotherapy	11	25
3.	Surgery	13	30
TOTAL :		44	100

16 cases had pre-existing lesion in the form of mole, cyst, burn, scar, lupus vulgaris and senile keratosis shown in Table III.

Table III

S No.	Pre-existing lesion	No. of Patients
1.	Mole	3
2.	Cyst	1
3.	Burn Scar	7
4.	Senile Keratosis	3
5.	Lupus vulgaris	2
TOTAL :		16—11.6%

Delay in the treatment is shown in Table IV. Maximal delay was 10 years and shortest was 3 months. No relationship exists between delay in the treatment and extent of lesion.

Table IV

Duration in years	(in years)						
	Less than 1 1 year	2	3	4	5	6	7 or more
Male	22	24	18	8	6	4	2
Female	12	11	16	8	5	4	4

The lesions varied from a few mm. to several cms. Most of the lesions (67%) were small ranging from 3 mm. to 19 mm. in size. (Table V)

Table V

Size (in cm.)	<1 cm.	1	2	3	4	5	6	7 or Total more
Male	12	42	18	6	4	2	2	84
Female	18	30	8	3	4	2	1	66

Distribution of basal cell carcinoma is given in Table VI. The nose, cheek, lower eyelid, inner canthus of eye are most commonly involved in agreement with other reports (Bilisar et al. 1959).

Table VI

Site	No. of patients	Percentage
Forehead	2	1.33
Nose	40	26.66
Upper eyelid	2	1.33
Lower eyelid	3	2.00
Inner canthus	40	26.66
Outer canthus	23	15.33
Lower lip	3	2.00
Upper lip	4	2.66
Cheek	20	13.33
Neck	3	2.00
Unclassified	10	6.6

Treatment :

The choice of treatment depends on size, site, depth and histopathological type of the lesion. In the present series 112 cases (77%) were treated by surgery, 22 cases (13.3%) by radiotherapy and 16 cases were treated by combined radiotherapy and surgery.

The main form of the surgical repair in case is summarized in Table VII.

Table VII

S.No.	Treat- ment	No. of Patients	Percen- tage
1.	Excision and direct- suture	47	31.33
2.	Excision add Wolfe Grafting	11	7.33
3.	Excision and S. S. G.	37	24.66
4.	Excision and Flap	11	7.33
5.	Miscellaneous (and exte- nsive surgery)	6	4.00

Table VIII
Recurrences According to Mode of Treatment

S. No.	Procedures	No. of Patients	Percentage	Recurrence
1.	Surgical	112	74.66 %	2-3%
2.	Radiotherapy	32	14.66 %	20%
3.	Radiotherapy + Surgery	16	10.66 %	10%

In 47 cases where the tumour was less than 4 mm. in diameter, treatment was by excision and direct suture. In 37 cases where lesion was little larger in size but was not infiltrating into the deeper structures excision and thick split skin grafting was done. In 11 cases where lesions were of 5 to 8 mm. in size, excision and full thickness skin graft was used. In this group the cosmetic appearance after surgery was better.

In 11 cases where the lesions were of more than 8 mm. size after excision the bone and cartilage were exposed, local flaps from forehead or cheek were used for reconstruction. In 6 advanced cases with involvement of the skin mucous membrane and mesodermal tissues, after a total excision immediate reconstruction of nose, lip and eyelid was done.

Recurrences :—

In cases treated by surgery there was recurrence in 2.3% cases, out of which 7 cases had new tumour, while 3 had recurrence at same place (previously operated site).

Recurrence after radiotherapy was 20% and also at shorter interval, while cases which had combined radiotherapy and surgery had a recurrence rate of 10%.

Summary :

An analysis of the 150 cases of basal cell carcinoma seen at plastic surgery department at Jaipur are reported. 112 cases were treated by surgery with a recurrence rate of 2-3% while radiotherapy had high recurrence rate of 20%, Surgery is better modality of treatment as it has got a much better cure rate.

References

1. Aeremia, B. S. : Reconstruction of the face and cranium after Radical Operation of Basal Cell Carcinoma. *J. Int. Coll. Surg.* 35 : 644; 50, May, 1961.
2. Jeff, R. ; Moore, M. D : Treatment of cicatrising Basal Cell carcinoma. *Plast. Reconst. Surg.*, 371 : V. 47. 1971.
3. Levin, M. L. : Basal Cell Carcinoma, two cases with unusual features. *Plast. Reconst. Surg.* 32 : 344-347, 1973.
4. Pickrell, K. L.; Georgiade, N.; Admon, J. and Muttain, G. : Surgical Treatment of early carcinoma of the face. *Postgraduate Med.* 27 : 406, 1960.
5. Rintala, A. : Surgical therapy of basal cell carcinoma, with recorection of the macroscopic and microscopic control of excisions with recurrences. *Scand. J. Plast. Surg.* 5-87, 1971.
6. Shanoff, L. B.; Spera, M.; and Hardy, S. B. : Basal Cell Carcinoma-a statistical approach to management. *Plast. Reconstructive Surg.*, 39-619, 1967.
7. Stark, R. B. : *Plastic Surgery*, P. 165. New York, 1962.