

TRANSACTIONS OF THE SWEDISH DERMATOLOGICAL SOCIETY

The National Medical Annual Congress in Stockholm, December 2, 1967

SYMPOSIUM ON THE TREATMENT OF CANCER CUTIS

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INTRODUCTION

B. Bäfverstedt: Cancer cutis is a comprehensive concept. In this symposium we shall confine ourselves to the treatment of basal cell carcinoma and squamous cell carcinoma in the skin, thus leaving out orificial carcinomas (lips, vulva, anus) which have their own biology and treatment; malignant melanomas and the rare sarcomas are also omitted.

With regard to skin cancer (with the exception of basal cell carcinoma and malignant melanoma) we know that the number of cases reported in 1963 was 502, representing 2% of all cases of cancer, and that of the 502 cases, 464 were squamous cell carcinomas, 75% of which were localized in the head and neck.

Unlike squamous cell carcinoma, basal cell carcinoma is not reported to the Central Cancer Registry in Sweden.

As to basal cell carcinoma (definite and probable) we know from Hellgrens¹ investigations that its frequency in the population of Sweden is about 0.12% for men and 0.08% for women, which means a prevalence of about 7 000 (4 200 men and 2 800 women). It is reported that nearly 90% of cases of basal cell carcinoma are situated in the region of the head.

In Sweden, skin carcinoma was formerly almost exclusively treated radiologically. Now, for the most part, surgical treatment or possibly a combination of surgical and radiological treatment is given. Hitherto other methods have been used only to a very limited extent in this country.

¹ Personal communication.

RADIOTHERAPY

F. Edsmyr: At Radiumhemmet in Stockholm, from 1959 to 1961, 602 basal cell carcinomas were treated with radiotherapy, and 65 squamous cell carcinomas were treated primarily with irradiation. 395 basal cell carcinomas (66%) and 59 squamous cell carcinomas (90%) were localized on the face, and 102 (17%) and 13 (20%) respectively, were around the eyes.

Basal cell carcinoma on the face was verified in 58% by biopsy; squamous cell carcinoma in 100%. Of the latter, 50% (30 cases out of 59) had been primarily clinically diagnosed as basal cell carcinoma.

Of the patients with basal cell carcinoma, 3% were under 40 years of age and 75% were over 60; 85% of those with squamous cell carcinoma were over 60.

Radiotherapy given with a single dose has usually caused punched-out scars with atrophy and depigmentation. On the other hand, fractional treatment with daily radiation exposures of 900-1 000 R for 4-5 days, 20-50 kV, additional filter 0.25-2 mm Al and with varying field limits, has given good results from a cosmetic point of view. For large tumours, conventional radiotherapy or electron beam treatment was applied.

With regard to recurrences, see Table I. In basal cell carcinoma, recurrences are usually the result of too weak additional filters being used.

Treatment in the eye region did not cause any eye injury or eyelid retraction.

Metastases in connection with squamous cell carcinoma occurred in 3 cases (5%) and appeared

Table I. Recurrences

	Face	Recur- rences	Eye region	Recur- rences
Basal cell carcinoma	395	21 (5.8%)	102	8 (7.8%)
Squamous cell carcinoma	59	2	13	—

within 4, 6 and 24 months, respectively, of the irradiation (cheeks, nose and neck).

Fractional treatment for a longer period (6–8 days) with variable field limits can be recommended as a convenient and safe method of treating basal cell carcinoma, inasmuch as it gives good cosmetic results and there are comparatively few recurrences.

In squamous cell carcinoma the histopathologic differentiation degree of the tumour should be taken into account. For low differentiated squamous cell carcinoma, irradiation is probably most suitable. Plastic surgery is the most suitable form of treatment for the other types.

SURGICAL TREATMENT

B. Nylén & J. O. Strömbeck: Radical excision is the prerequisite of good therapeutic results. In basal cell carcinoma the margins should be about 3 mm and in squamous cell carcinoma not less than 5–10 mm. In some cases it may be difficult to estimate macroscopically the extent of the tumour, but with these margins the risk of inadequate surgery should be minimal. It is often more difficult to estimate the depth for radical surgery than laterally. As a rule the tumour is excised down in the subcutaneous fat, except in some cases where the underlying tissue (muscle, bone, cartilage, for example) is included. The underlying cartilage is often included, for example, in the nose and ear regions. Cauterization by means of diathermy is uncertain from the point of view of radical surgery and, in our opinion, should not be considered if cancer cutis is suspected. Biopsy can sometimes be considered when the diagnosis is uncertain. For clinically certain skin carcinomas we prefer excision biopsy.

The tissue defect occurring after surgical excision is generally closed by primary suturing after undermining. The excision is made in the

lines of skin tension, so as to obtain as few conspicuous scars as possible.

If the size of the defect precludes direct suturing, a free skin graft may be performed. On the face, most often a full thickness skin graft is made, whereas on other parts of the body a split skin graft is applied. In many cases, however, a better cosmetic result can be obtained by means of a pedicle flap. A flap is necessary if the underlying bone has been exposed.

Skin cancer localized in the lower eyelid is in most cases basal cell carcinoma. Skin cancer localized in these areas requires special surgical care and radical surgery at the primary intervention. Surgical reconstruction is possible after excision of the entire eyelid, with good functional and cosmetic results.

In cases of basal cell carcinoma of the superficial type, which is most often localized in the trunk and is widespread, the entire tumour can be removed with the aid of a dermatome. The wound surface then heals secondarily. If there is recurrence, this can be readily excised and the defect primarily sutured.

The material for 1959–1966, from the Department of Plastic Surgery at Karolinska Sjukhuset, comprises 292 cases, of which 185 were admitted to the Department of Plastic Surgery and 107 were operated as outpatients. 83% of the patients were over 50 years of age; there were slightly more men (54%) than women (46%). Localization was typical, 83% in the head and neck; the cheeks were affected in 22% of the cases, the nose in 19% and the lower eyelid in 15%.

Pathology showed basal cell carcinoma in 80%, type *mixte* in 5% and squamous cell carcinoma in 14%. Among the larger tumours squamous cell carcinoma was more frequent than basal cell carcinoma. Nearly 70% of the basal cell carcinomas were less than 10 mm in diameter.

In 3 cases, skin tumours occurred in connection with psoriasis (of which 2 cases were squamous cell carcinoma), in 2 cases after burn injuries (of which 1 was squamous cell carcinoma), in 1 case in a decubital wound (basal cell carcinoma) and in 1 case together with lichen ruber planus (squamous cell carcinoma).

The operations performed were: primary sutures, 40%; full thickness skin grafts, 12%; split skin grafts, 16%; flap procedures 30%, and composite graft, 2%.

Table II. Therapeutic results

	No.	Recurrences
A. Primary cases (not previously treated)	199	12 (6%)
Reoperated recurrences	12	5
B. Secondary cases (previously treated by radiation or diathermy)	78	9 (12%)
Reoperated recurrences	9	3
C. Secondary cases (surgically treated)	15	0

As is shown in Table II the frequency of recurrence after surgical treatment alone was 6%, and after previous irradiation of diathermy, 12%. After one or more operative interventions 97% of the patients could become free from recurrence.

The 15 patients with cases of *type mixte* had the highest recurrence rate (7 cases).

It should be pointed out that the material is selective. About two-thirds of the patients were treated as inpatients, which implies that the carcinomas were comparatively large or their localization made treatment more difficult.

As regards recurrence, the results after surgical treatment of skin cancer is about the same as after radiotherapy. With both methods, recurrence was most often due to the difficulty of deciding the extension of the carcinoma.

We consider that, in these types of tumour, adequate surgery gives excellent results in most cases. Among other advantages is the fact that one knows what has been removed, namely, that the margins can be determined histologically. In certain localizations, surgery is definitely to be preferred. This applies especially to the regions of the nose, ears and eyelids. We wish to emphasize that these cases should be managed in close collaboration with the radiotherapist. Although prognosis is very good in the great majority of cases, the physician who is giving the treatment must be aware that skin cancer *can* lead to serious destructive conditions and even cause death, if adequate treatment is not introduced from the outset.

OTHER METHODS OF TREATMENT

B. Bäfverstedt: Other methods of treatment fall, to a great extent, into three categories:

1. Curettage and electrodesiccation. After local anesthesia the tumour is removed by scraping with a curette, the bleeding surface is cauterized with a diathermic needle until complete hemostasis is obtained, when scraping, cauterizing, etc. is continued until eventually a clean and healthy base is reached (biopsy!).

2. The electrodesiccation phase can be replaced by treatment with cytotoxic substances such as podophyllin, methotrexate, fluoruracil, and colchicine derivatives and similar substances.

3. Cytotoxic and cytostatic substances have also been used alone.

The nonradiologic and nonsurgical methods that have just been mentioned are simple and can with advantage be managed by the dermatologists themselves in suitable cases. Particularly suitable are the superficial, centrifugally growing

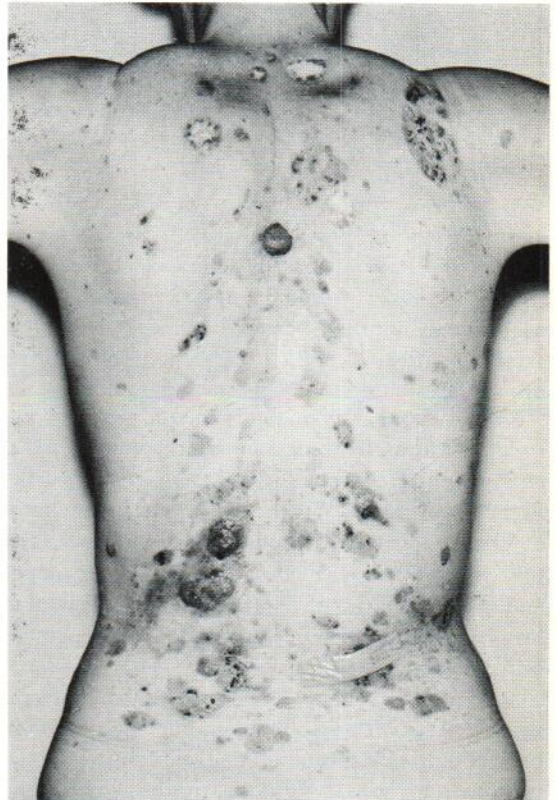


Fig. 1. Woman aged 35 with multiple nevoid basal cell carcinoma syndrome: The first nevus-like basaliomas were observed when she was 4 years old. Treatment: radiotherapy, electrocaustic scraping, lapis, colchicine ointment, podophyllin ointment, etc. At the top the ugly roentgen scars are visible.

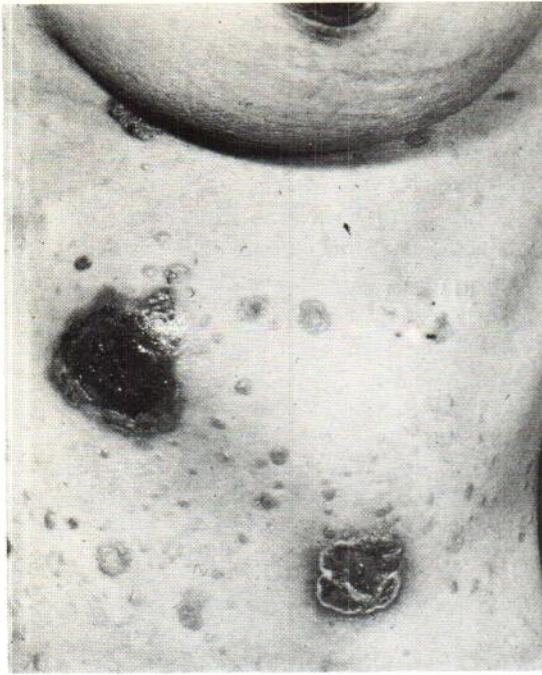


Fig. 2. Same case as in Fig. 1: Basal cell carcinomas of different sizes, the largest the size of a plum; bleeding, exophytic growth.

and centrally atrophying basal cell carcinomas on the trunk, isolated or multiple, as well as, of course, the cases of innumerable carcinomas which are seen in multiple nevoid basal cell carcinoma syndrome (Figs. 1 and 2). Here, it is difficult or even impossible to apply surgery or radiology. On the other hand, the methods in question are not suitable, or at least cannot be recommended at present for the morphea-like carcinomas, especially if they are situated on the nose. Such cases must be treated by the surgeons and radiologists, and this naturally applies also to invasive, advanced and neglected cases of basal cell carcinoma, and in Sweden we likewise include cases of squamous cell carcinoma.

Belisario in Sydney has obtained the best cosmetic results with cytostatics in combination with, or without, electrocautery and curettage in basal cell tumours, actinic keratosis, morbus Bowen and keratoacanthoma. Cytostatic agents, however, are not suitable for treating squamous cell carcinoma.

In Sweden, Bjarke² has treated cases of multiple, superficial basal cell carcinoma with (a) radio-

therapy alone, (b) curettage + electrodesiccation, (c) curettage + podophyllin solution using Nelson's method (L. M. Nelson, Arch. Derm. 93: 457, 1966), and (d) podophyllin painting alone. Healing was obtained with all the methods. Cosmetically the results were unsatisfactory after radiotherapy, whereas the best results in respect of both healing and cosmetic appearance were obtained with podophyllin painting alone: all (26) the carcinomas disappeared definitively without leaving any trace at all in the skin.

CONCLUDING REMARKS

B. Bäfverstedt: Prognosis in skin cancer (basal cell carcinoma and squamous cell carcinoma) is good. In more recent, large, foreign materials (R. G. Freeman & Knox: Treatment of Skin Cancer. Recent results in cancer research. Berlin-Heidelberg-New York, 1967), the number of cures is stated to be about 97%, obtained with one or other method, or with a combination of different methods. These figures, which should correspond with the figures reported here, are substantially higher than those previously obtained with only radiotherapy or surgery. The few remaining per cent, failures, are due mainly to the patient's neglecting to seek medical care at the proper time or to previously incorrect treatment based on wrong diagnosis.

Therefore it may be assumed that, if the results are to be still further improved, this will depend on patients' seeking medical attendance for the nodules in their skin and on the physician's establishing a correct diagnosis even earlier and instituting the appropriate treatment. Intimate and unprejudiced collaboration between the general practitioner-dermatologist, surgeon, plastic surgeon, radiologist and pathologist is here of decisive importance.

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² Personal communication.