from nucleic acid damage to other cells and tissues exposed to PUVA. Schill et al. (7) investigated spermatogenesis in 9 psoriatics receiving PUVA and found it to be unaffected by the treatment. The notion that PUVA might interfere with the function of the thyroid gland due to its unprotected location just below the skin surface was not supported by the present study. However, the number of patients investigated was small and the UVA dose was less than used by others. Therefore, no definite conclusions can be drawn until it has been studied whether prolonged therapy and higher PUVA doses interfere with the function of the thyroid gland.

REFERENCES

1. Dige-Pedersen, H. & Hummer, L.: Serum thyrotropin concentrations under basal conditions and after stimulation with thyrotropin-releasing hormone in idiopathic non-toxic goiter. J Clin Endocrinol Metab *44:* 1115, 1977.
2. Hashimoto, K., Kohta, H., Kumakiri, M., Blender, S. L. & Wilhi, J.: Psoralen–UVA-treated psoriatic lesions. Arch Dermatol *114:* 711, 1978.
3. Kraemer, K. H. & Weinstein, G. D.: Decreased thymidine incorporation in circulating leucocytes after treatment of psoriasis with psoralen and longwave ultraviolet light. J Invest Dermatol *69:* 211, 1977.
4. Melski, J. W., Tannenbaum, L., Parrish, J. A., Fitzpatrick, T. B., Bleich, H. L. and 28 participating investigators: Oral methoxalen photochemotherapy for the treatment of psoriasis: a cooperative clinical trial. J Invest Dermatol *68:* 328, 1977.
5. Parrish, J. A., Fitzpatrick, T. B., Tannenbaum, L. & Pathak, M. A.: Photochemotherapy of psoriasis with oral methoxalen and longwave ultraviolet light. N Engl J Med *291:* 1207, 1974.
6. Pathak, M. A. & Kramer, D. M.: Photosensitization of skin in vivo by furocoumarins (psoralens). Biochim Biophys Acta *195:* 197, 1969.
7. Schill, W.-B., Hofmann, C. & Plewig, G.: Spermatologische Untersuchungen unter Photochemotherapie (PUVA-therapie). Arch Dermatol Res *264:* 153, 1979.
8. Stern, R. S., Thibodeau, L. A., Kleinerman, R. A., Parrish, J. A. Fitzpatrick, T. B. and 22 participating investigators: Risk of cutaneous carcinoma in patients treated with oral methoxalen photochemotherapy for psoriasis. N Engl J Med *300:* 809, 1979.
9. Weismann, K., Howitz, J. & Bro-Jørgensen, A.: Treatment of resistant psoriasis with oral 8-methoxypsoralen and longwave ultraviolet light (PUVA). Acta Dermatovener (Stockholm) *57:* 73, 1977.
10. Wolff, K., Fitzpatrick, T. B., Parrish, J. A., Gschnait, F., Gilchrest, B., Hönigsmann, H., Pathak, M. A. & Tannenbaum, L.: Photochemotherapy for psoriasis with orally administered methoxalen. Arch Dermatol *112:* 943, 1976.

Malignant Melanoma and Histiocytofibroma

Frédéric Piette, Micheline Rozenberg, Françoise Vandenbussche[1] and Henri Bergoend

Departments of Dermatology and [1]Plastic Surgery Regional Hospital, 59037 LILLE Cedex, France

Received February 25, 1980

Abstract. In patients with malignant melanoma, histiocytofibromas often appeared to be present. The frequency of this association has been determined in 60 female and 40 male patients, and compared with age- and sex-matched controls. Histiocytofibromas are significantly more common in females with malignant melanoma than in controls. This relationship is not found in males. Therefore, it would seem important to make a careful examination of nevocytic nevi in women having this benign tumour because of the high risk of developing a malignant melanoma.

Key words: Melanoma; Histiocytoma

Fibrous histiocytic tumours of the skin are a common phenomenon and are variously described as dermatofibroma, histiocytoma, sclerosing haemangioma, and subepidermal nodular fibrosis (2, 4). These lesions consist of mixture of histiocytes and fibroblasts and can display variable histological patterns, depending on the predominant cell content. In the absence of excision, it is difficult to ascertain the clinical differences between these tumours, and the term "histiocytofibroma" would seem preferable.

In patients with malignant melanoma, one or several histiocytofibromas appeared to be a common discovery at the first, or subsequent examinations, when carefully examined. This is indeed rather commonplace, as the sites of predilection are the lower legs, especially in females and such findings are classically reported. However, we wanted to determine whether this association of malignant melanoma with histiocytofibroma is coincidental or not.

PATIENTS AND METHODS

One hundred patients with malignant melanoma were examined. Sixty of the patients were female and 40 were male. In each sex, they were classified into 10-year age groups and according to type of melanoma (criteria of Clark et al.) (1).

The controls were matched with the patients with respect to age and sex. In each 10-year age group, the ratio

Table I. *Age distribution of the female patients and controls*

H. = histiocytofibromas

Age group	Melanomas		Controls	
	No. of patients	No. of patients with H.	No. of subjects	No. of subjects with H.
10–19	1	0	3	0
20–29	5	0	15	1
30–39	8	4	24	5
40–49	14	7	42	7
50–59	12	8	36	4
60–69	10	5	30	7
70–79	6	3	18	2
80–89	4	3	12	2
Total	60	30	180	28

was the same: three times as many controls as patients (180 female controls, 120 male controls).

These 300 subjects, free of any patent malignancy, were examined in various departments (neurology, orthopaedics, ophthalmology, dermatology).

In both patients and controls, the presence of one or several histiocytofibromas was noted: reddish or brownish hard lesions, freely mobile over the underlying tissues, but firmly attached to the epidermis (5).

Statistical analysis. The χ^2-test was used to compare the proportions of histiocytofibromas in different groups. Differences were considered to be almost significant when p-values were smaller than 0.05 and significant when smaller than 0.01. Yates' correction was applied when p-values were at the limit of the significance level.

RESULTS

The frequency of histiocytofibromas was determined separately in female (Table I) and male (Table II) patients and controls: histiocytofibromas were noted in 30 of the 60 female patients with malignant melanoma (50%), and in 12 of the 40 male patients (22.5%). Twenty-eight of the 180 female controls (15%) and 9 of the 120 male controls (10%) had histiocytofibromas.

Table II. *Age distribution of the male patients and controls*

H. = histiocytofibromas

Age group	Melanomas		Controls	
	No. of patients	No. of patients with H.	No. of subjects	No. of subjects with H.
10–19	1	0	3	0
20–29	3	0	9	0
30–39	8	2	24	2
40–49	13	3	39	5
50–59	10	4	30	3
60–69	1	0	3	1
70–79	3	0	9	1
80–89	1	0	3	0
Total	40	9	120	12

Table III. *Age distribution of the female and male patients according to type of melanoma*

SSM=superfical spreading melanoma. NM=nodular melanoma. UNCl=unclassified. H.=histiocytofibromas

	Females		Males	
	No. of patients	No. of patients with H.	No. of patients	No. of patients with H.
SSM	35	15	26	5
NM	16	9	12	3
UNCl	9	6	2	1

The classification of patients according to type of melanoma is given in Table III.

Statistical analysis

There is no significant difference between the incidence of histiocytofibromas in female and male controls ($p>0.05$).

The presence of histiocytofibromas is more frequent in patients than in controls, likewise in females than in males. This difference is highly significant in females ($\chi^2 \simeq 29.1$, $p<0.001$) but not significant in males (χ^2 with Yates' correction $\simeq 3.07$, $p>0.05$).

DISCUSSION

First, our study is open to criticism because of the lack of histological examination of each tumour called "histiocytofibroma". The clinical diagnosis may be false in some cases (3), but very often it is obvious. On the other hand, it was found difficult to perform a biopsy in all cases, especially in controls. Bearing in mind these reservations, we can conclude that in our study, there is no significant difference between the incidence of histiocytofibromas in female and male controls. However, it is classically admitted that these tumours occur more frequently in females than in males, though this conclusion is perhaps false—women consult more readily than men for this kind of lesion.

As histiocytofibromas are significantly more common in female patients than in controls, it

seems very important to examine carefully and regularly nevocytic nevi in women with histiocytofibromas. They bear a statistically high risk of developing a malignant melanoma. In all our patients, the histiocytofibromas appeared before the melanomas. To our knowledge, this frequent association has never been reported. However, further studies are needed in order to confirm our results. The pathogenesis of this association is unclear (immunological disturbance?) and it remains to be explained why the association may be fortuitous in males, but surely more than coincidental in females.

REFERENCES

1. Clark, W. H. Jr, From, L., Bernardino, E. A. & Mihm, M. C.: The histogenesis and biologic behavior of primary human malignant melanomas of the skin. Cancer Res *29*: 705–727, 1969.
2. Montgomery, H.: Dermal neoplasms: fibrous, muscular and neural tumors. *In* Dermato-pathology, pp. 1028–1036, Harper and Row Publishers, New York 1967.
3. Niemi, K. M.: The benign fibrohistiocytic tumors of the skin. Acta Dermatovener (Stockholm) *50*, Suppl. 63: 1–66, 1970.
4. Rentiers, P. L. & Montgomery, H.: Nodular subepidermal fibrosis. Dermatofibroma versus histiocytoma. Arch Dermatol Syph *59*: 568–583, 1949.
5. Rook, A. J., Wilkinson, D. S. & Ebling, F. J. G.: Textbook of dermatology, 3rd ed., vol. 2, pp. 1522–1524, Blackwell Scientific Publications, Oxford 1979.

Allergy to Human Seminal Plasma: A Presentation of Six Cases

Susanne Kroon

Department of Dermatology, Gentofte Hospital, Hellerup, Denmark

Received February 29, 1980

Abstract. Six women had symptoms of immediate type allergic reactions such as localized oedema, urticaria and pruritus elicited at, or soon after intercourse. All had positive skin prick tests with dilutions of human seminal plasma. The symptoms failed to appear when the women's partners used a condom at intercourse. None of the women had IgE antibodies in serum against human seminal plasma when tested with the radioallergosorbent test. This type of allergic reaction is easily overlooked.

Key words: Human seminal plasma; Urticaria; Prurigo

A description of an allergic reaction to human seminal plasma (HSP) was first published in 1967 (4), and subsequent reports have added 12 further cases (2, 3, 5, 6, 7, 8, 9, 10, 11). All patients had a wide range of symptoms typical of an immediate type of allergic reaction. Severe cases had anaphylaxis with loss of consciousness within minutes after intercourse. Others had localized oedema, generalized urticaria and/or itching following intercourse. Three cases within one family developed local symptoms only, such as vaginal itching and swelling (2). Most patients had an atopic family history. Because of the severity of the symptoms the association of symtoms with intercourse has been obvious.

I want here to report on 6 patients with less dramatic symptoms, in whom the diagnosis was missed prior to admission.

CASE REPORTS

Case 1

A 24-year-old unmarried woman, without children. No atopic family history.

Her problem was: "something with men". When she lived with a man she experienced universal pruritus and intermittent periorbital oedema. During the last month she had had vaginal itching and burning. Because of the itching she had lived with 5 different men for the last 15 months. Some were rejected because of the itching, some left her because her intense scratching made them itch. On close questioning it appeared that symptoms would only appear after intercourse and persisted for a couple of days.

For contraceptive purposes she used birth control pills and later on an intra-uterine device but, without alleviation of the symptoms. After use of a condom, however, no symptoms had occurred for 6 months. She then started to use contraceptive pills again, after which she experienced only mild pruritus following intercourse. At the latest control she was free from symptoms after intercourse.

Case 2

A 32-year-old married woman with 2 children. No atopic family history.

From her 12th to her 20th year she had minor attacks of urticaria. Then symptomless until January 1978. Then again urticaria with daily attacks localized on the legs and arms. There had been swelling of the lips and periorbital oedema. Symptoms started only during intercourse and in the bathroom soon thereafter. For contraceptive purposes a condom was used but not until shortly before ejaculation. After consistent use of a condom at intercourse, no symptoms reported for 5 months. After use of condom was abandoned, one severe attack with periorbital oedema, and several minor attacks.

Seen latest time 7 months later, now without symptoms following intercourse.