



Fig. 2. Hyperkeratosis, acanthosis, and presence in the papillary dermis of amorphous masses of amyloid (Congo red, $\times 300$).

bility of using DMSO for solubilizing amyloid fibrils was first demonstrated in murine experimental amyloidosis (8) and subsequently in patients with renal amyloidosis in which amyloid-like material was present in the urine (7).

In our experience we have observed encouraging and beneficial clinical effects by using topical DMSO in our case of LA. However, at a second histological examination we found persistence of the amyloid in the papillary dermis. Therefore further studies are needed to ascertain the real effectiveness of this kind of management in LA.

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A Survey of Elderly New Patients at a Dermatology Outpatient Clinic

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A study of all new dermatitic out patients > 70 years of age, referred in the period January-June 1987 (257 patients), was undertaken to obtain information on the types of skin diseases and the dermatological outpatient services required in the case of the elderly. The group accounted for 14% of all new patients. The leading diagnoses were seborrheic keratosis (15.6%), basal cell carcinoma (13.6%), solar keratosis (13.2%), psoriasis (9.7%) and leg ulcer (9.3%). A skin biopsy was required in 27%, and surgical treatment in 31% of the group, compared with 12% and 16%, respectively, of all new patients during the same period. Consequently, the elderly group were more likely to require a follow-up appointment and tended to be more time-consuming

outpatients. **Key words:** Geriatric outpatients; Dermatoses.

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During the period, 1 January-30 June 1987, 1 833 new patients were seen in the dermatology outpatients clinic, of whom 257 (14%) were > 70 years of age. They formed the patient material of the present study, the purpose of which was to learn more about the elderly dermatological outpatients and their skin

Table I. Prevalence of skin conditions in 257 elderly new outpatients

Diagnosis	No. of patients	Prevalence (%)
Seborrheic keratosis	41	15.6
Basal cell carcinoma	35	13.6
Solar keratosis	34	13.2
Psoriasis	25	9.7
Leg ulceration	24	9.3
Stasis dermatitis	12	4.7
Atopic dermatitis	10	3.9
Allergic contact dermatitis	9	3.5
Pruritus	8	3.1
Dermatitis (unclassified)	8	3.1
Asteatotic eczema	6	2.3
Lentigo	6	2.3
Diverse	39	15.2
Total	257	100

complaints. The source of referral, the frequency of the need for surgical procedures and patient-compliance were also recorded.

MATERIAL

Ullevaal Hospital's Department of Dermatology has a catchment area, including Oslo and two other counties, with a total population of 817 000. There were 147 patients aged 71–80 years and 110 patients > 80 years of age in the group. Of the total of 257 patients, 170 (66%) were female, and 225 (88%) patients came from Oslo. Despite their numerical predominance, the total of female patients represented 3.45/1 000 of females in the > 70 years general population group, while the male total accounted for 3.64/1 000 of men in the same age group. Thus the age-specific frequencies showed no numerical differences between men and women.

Source of referral

As expected, 181 patients (70%) were referred by general practitioners. Almost equal numbers of patients were referred by other specialists combined (5%) and private practising dermatologists (4.3%). Interestingly, 11.7% were internal referrals from the hospital's other departments, while 8.5% of the new patients were not referred by a doctor.

RESULTS

Diagnoses

Five conditions dominated the list of diagnoses, led by seborrheic keratosis, basal cell carcinoma, solar keratosis, psoriasis and leg ulcer (Table I). Males accounted for 66% of all seborrheic keratosis patients and 57% of the basal cell carcinoma cases. In con-

trast, females dominated in the psoriasis group (76%), leg ulcer group (71%) and to a lesser extent among solar keratosis patients (57%). In addition to basal cell and squamous cell tumours (2 cases), other skin tumours included occasional cases of lymphoma, lymphangioma, Bowen's disease, Paget's disease, keratoacanthoma and atheroma, while no cases of mycosis fungoides or malignant melanoma were registered in the group during the period. A total of 68 different dermatological diagnoses were shared by the 257 patients. There were 35 diagnoses for which only a single patient was registered, while 60 patients had two or more dermatoses.

Skin biopsy and surgical therapy

A skin biopsy was required in 70 cases (27%), and the pre-biopsy clinical diagnosis proved correct in 51 of these. Of the 19 patients misdiagnosed clinically, 12 involved diagnostic difficulty in clinically distinguishing basal cell carcinoma, solar keratosis and seborrheic keratosis. Surgical treatment was necessary in 80 patients (31%), including 45/70 patients (64%) undergoing a skin biopsy.

Compliance

Sixty percent of this elderly group of new outpatients required a follow-up appointment and of the 154 patients only 10 (6.5%) failed to keep their appointment.

DISCUSSION

Elderly patients (> 70 years old) accounted for 14% of all new dermatological outpatients. While few comparable figures exist, Epstein (1) reported that 8% of his private patient group was > 70 years of age. Christophersen (2) noted that patients attending hospital dermatology clinics were generally older than the group attending private dermatologists in Denmark. Weismann et al. (3) expressed the opinion that the elderly are not frequent visitors to dermatology clinics. This contention was not supported by our findings. A comparison of the age groups per 1 000 population in the respective age groups showed that patients > 80 years (4.68/1 000) were, with the exception of the 1–10 years group, the most frequent new visitors to our outpatient clinic. The largest number of patients were in the 21–30 years group (19% of all new outpatients), but they represented only 4.3/1 000 of that age group.

While female patients showed a numerical predominance (66%), in keeping with previous observations of the general population of dermatology patients (2, 4, 5), there was no real difference between the sexes in this elderly group when totals were adjusted according to female: male population ratio in the respective age groups of the general population.

Droller (6) found allergic contact dermatitis to be rare in the elderly, however, an incidence of 3.5% in the present group compares favourably with the finding of Weismann et al. (3), that this condition is as frequent among the elderly as in the normal populations in Scandinavian countries. In the present group, 9 cases of a primary diagnosis of allergic contact dermatitis accounted for 32 positive epicutaneous test reactions involving 23 different allergens.

Transformation of Myelodysplasia to Acute Myeloid Leukaemia during Psoralen Photochemotherapy (PUVA) Treatment of Psoriasis

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A patient with stable chronic myelomonocytic leukaemia was treated with 8-methoxypsoralen photochemotherapy (PUVA) for erythrodermic psoriasis. After 4 months, transformation to acute myeloid leukaemia (AML) occurred. We would suggest caution when considering PUVA therapy in patients with pre-leukaemic disorders. Key word: Chronic myelomonocytic leukaemia.

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The myelodysplastic syndromes (MDS) are a group of related disorders which have in common a high incidence of evolution to acute leukaemia. It is widely believed that the MDS represent a stage in malignant transformation of haemopoietic stem cells brought about by cumulative genetic insults. The nature of these insults is unknown, but viruses, chemicals and radiation have been suggested as possible factors (1).

Psoralen plus long-wave ultraviolet photochemotherapy (PUVA) produces DNA damage in human

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cells in vitro (2) and its potential for inducing malignant change is undisputed. Since a substantial proportion of long-wave ultraviolet light (UVA) directed at the skin penetrates the dermis (3) it seems likely that PUVA could inflict DNA damage on haemopoietic stem cells circulating through the dermal vasculature (4). This could ultimately result in malignant transformation.

Here, we describe a patient with Chronic myelomonocytic leukaemia (CMML) in whom transformation to acute myeloid leukaemia (AML) occurred during PUVA therapy for psoriasis.

CASE REPORT

A 71-year-old caucasian man presented in 1983 with spontaneous bruising. There were no other symptoms. He had a long history of chronic plaque psoriasis and polymyalgia rheumatica diagnosed 7 years previously, for which he was receiving prednisolone 5 mg daily. Psoriatic plaques were present on the legs but clinical examination was otherwise entirely normal. Haemoglobin was 12.3 g/dl, platelets $79 \times 10^9/l$, and white cell count $16.8 \times 10^9/l$, of which 57% were mature neutrophils, 12% lymphocytes, 9% monocytes, 6% myelocytes, 5% myeloblasts and 4% nucleated red cells.