

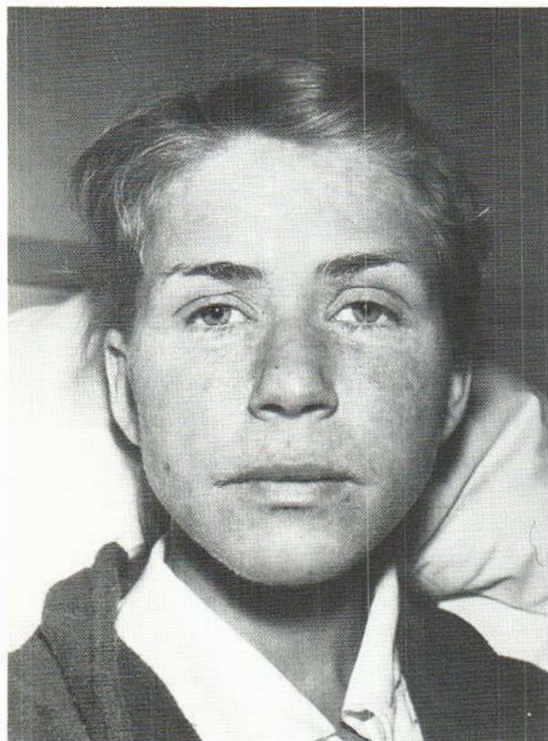


Fig. 2. The patient presenting atopic dermatitis with involvement of the entire face.

Atopic cataract is a well-known complication of atopic dermatitis. Cataract has also been seen after topical ocular and systemic treatment with corticosteroids (4). Whether the lens opacity found in the left eye of our patient represents an incipient atopic cataract or is caused by topical corticosteroids remains to be elucidated.

In the light of the widespread use of topical corticosteroids, also to eyelids, it is remarkable that only 2 cases of corticosteroid-induced glaucoma have so far been reported. Nevertheless, we have no other explanation for the serious eye damage in our patient. It is therefore necessary to stress that the medication must not be allowed to enter the eyes. Furthermore, periodic measurement of the intraocular pressure is advisable in patients treated over a long period of time, especially if there is a family history of glaucoma.

REFERENCES

1. Becker, B.: The effect of topical corticosteroids in secondary glaucomas. *Arch Ophthalmol* 72: 769, 1964.

2. Cubey, R. B.: Glaucoma following the application of corticosteroids to the skin on the eyelids. *Br J Dermatol* 95: 207, 1976.
3. Gorin, G.: *Clinical Glaucoma*. Marcel Dekker Inc., New York and Basle, 1977.
4. Howell, J. B.: Eye diseases induced by topically applied steroids. *Arch Dermatol* 112: 1529, 1976.
5. Larsen, W. G.: Corticosteroids and glaucoma. *Arch Dermatol* 95: 645, 1967.
6. Zuger, C., Saunders, D. & Levit, F.: Glaucoma from topically applied steroids. *Arch Dermatol* 112: 1326, 1976.

Combination Chemotherapy in the Tumour Stage of Mycosis Fungoides with Cyclophosphamide, Vincristine, VP-16, Adriamycin and Prednisolone (COP, CHOP, CAVOP):

A Report from the Scandinavian Mycosis Fungoides Study Group

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Abstract. Combination chemotherapy with cyclophosphamide, vincristine, VP-16, adriamycin and prednisolone was given in 9 cases of mycosis fungoides in the tumour stage: 3 of these patients received COP, one received CHOP, and 5 CAVOP. Complete remission was obtained in one case and partial remission in 5, the response rate thus being 6/9. It was impossible, however, to maintain remission. The treatment was reduced or withdrawn owing to toxic effects in 4 cases. These forms of combination chemotherapy are beneficial in non-Hodgkin lymphomas but do not seem to be of value in the tumour stage of mycosis fungoides.

It is still not clear whether early aggressive chemotherapy in tumour cases of mycosis fungoides is of more benefit than a less aggressive

Table 1. *Combination chemotherapy in the tumour stage of mycosis fungoides*

	Day
COP	
Cyclophosphamide 600–1 000 mg/m ² i.v.	1
Vincristine 1.0 mg/m ² i.v.	1
Prednisolone 40 mg/m ² p.o. daily, repeated every third week (3 week cycle)	1–7
CHOP	
As COP plus adriamycin 30 mg/m ² i.v. (3-week cycle)	1
CAVOP	1
Cyclophosphamide 300 mg/m ² i.v.	1
VP-16 40 mg/m ² p.o. daily	1–5
Vincristine 1.0 mg/m ² i.v.	1
Prednisolone 40 mg/m ² p.o. daily (3-week cycle)	1–5

approach with single drugs, or combination chemotherapy in more tolerable doses for prolonged periods of time. Aggressive therapy induces remission in a proportion of cases but relapses are frequent when treatment is postponed (1, 3, 4). Owing to toxicity, maintenance treatment is not always possible.

Encouraging results in the treatment of non-Hodgkin lymphomas prompted us to use the same forms of systemic chemotherapy combinations (2).

Here we report the results of this aggressive type of combination chemotherapy of mycosis fungoides

in the tumour stage including cases with extra-cutaneous involvement.

PATIENTS

Nine patients with mycosis fungoides, stages III and IV according to the staging criteria of the Scandinavian Mycosis Fungoides Study Group (cutaneous tumours without dissemination to other organs: stage III; cutaneous tumours with enlargement of lymph nodes, histologically dermatopathic lymphadenopathy: stage IVa; and lymph nodes histologically lymphoma: stage IVb) were treated with combinations of cyclophosphamide, vincristine, VP-16, adriamycin and prednisolone (Table I).

All cases except one had previously been treated either with topical X-ray or electron beam irradiation, topical mechlorethamine or PUVA; 6 cases had received various forms of systemic chemotherapy. The disease was in an active phase in all patients at the initiation of therapy, in 4 of them in a phase of very rapid progression.

TREATMENT

Treatment was given according to the schedules presented in Table 1.

RESULTS

The results are presented in Table II. Complete remission was obtained in only one case, histologically confirmed. In another case there was complete remission clinically but not histologically (patient T.P.). Partial remission clinically was obtained

Table II. *Nine patients in the tumour stage of mycosis fungoides treated with COP, CHOP or CAVOP*

CR = complete remission; PR = partial remission (improvement by more than 50%); NC = no change; PD = progressive disease; PUVA = 8-MOP orally plus UVA, whole body treatment; EB = electron beam, local treatment; X-ray = local treatment

	COP			CHOP	CAVOP				
	M. Y.	A. J.	H. L.	I. C.	F. P.	E. U.	T. P.	O. B.	P. K.
Age	68	60	59	40	50	64	66	70	45
Sex	F	M	M	F	M	F	M	M	M
Stage	III	III	III	IVb	III	III	IVa	IVa	IVb
No. of treatment cycles	3	6	2	6	3	3	3	6	7
Therapeutic effect									
Initially (2–3 m)	PR	PR	NC	NC	CR	NC	PR-CR	PR	PR
Late (4–6 m)–	PD	PD	–	PD	PR	–	NC	PD	PD
Additional treatment	X-ray	X-ray	–	X-ray	EB	X-ray	PUVA X-ray	PUVA	X-ray
Side effects	Nausea				Alopecia. Dental loss. Bonemarrow depression	Alopecia.	Neuro- logical	Neuro- logical	Alopecia. Neurological Bone marrow depression

in 4 cases. Thus complete and partial remission was achieved in 6 out of 9 cases. Owing to toxic effects or therapeutic failure (NC, PD) the treatment was withdrawn after two to seven treatment cycles. It was thus not possible to maintain the initial remission by the present combinations of drugs.

Side effects requiring dosage reduction or withdrawal of treatment were reported as: nausea in one case, alopecia in 4 cases, dental loss in one, bone marrow depression in 2, neurological complaints (mainly paresthesia of the lower legs) in 3.

DISCUSSION

Aggressive treatment with three to five drug combination chemotherapy as presented in this report has been disappointing. Initially only one patient obtained complete remission and 5 partial remission. This response rate is of the same magnitude as we have previously found with other systemic treatments (1, 2, 3). However, the induced remissions were short-lived. Owing to the high degree of toxicity of the chosen combination of drugs their dosage levels could not be increased and were completely ruled out as maintenance treatment.

At this point it is tempting to speculate if a less aggressive attitude would be more beneficial in these patients, as such a treatment could be continued for prolonged periods.

We are still searching for the drug, or combination of drugs, of choice for the treatment of advanced cases of mycosis fungoides.

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REFERENCES

1. Groth, O., Molin, L., Thomsen, K., Grunnet, E., Hellbe, L., Holst, R., Michaelsson, G., Nilsson, E., Roupe, G., Schmidt, H. & Skogh, M.: Tumour stage of mycosis fungoides treated with bleomycin and methotrexate. *Acta Dermatovener (Stockholm)* 59: 59, 1979.
2. Hansen, M. M., Bloomfield, C. D., Jørgensen, J., Ersbøll, J., Pedersen-Bjergaard, J., Blom, J. & Nissen, N. I.: VP-16-213 in combination with cyclophosphamide, adriamycin, vincristine, and prednisone in treatment of non-Hodgkin's lymphomas. *Cancer Treatment Reports*, accepted for publication.

3. Molin, L., Thomsen, K., Volden, G., Bergqvist-Karlsson, A., Hallberg, O. & Hellbe, L.: Epipodophyllotoxin (VP-16-213) in mycosis fungoides. *Acta Dermatovener (Stockholm)* 59: 84, 1979.
4. Molin, L., Thomsen, K., Volden, G., Bergqvist-Karlsson, A. & Hellbe, L.: Prednimustine in mycosis fungoides. *Acta Dermatovener (Stockholm)* 59: 87, 1979.

A Lidocaine-Prilocaine Cream for Superficial Skin Surgery and Painful Lesions

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Abstract. A eutectic mixture of lidocaine and prilocaine in a water emulsion cream base produces effective superficial dermal analgesia when applied under occlusive dressing for 60 minutes. On the genitals, lips and oral mucosa, the application time can be reduced. The cream was found to be an effective alternative to conventional infiltration anesthesia for dermabrasion and superficial surgical procedures. It is especially useful in children for the removal of molluscum contagiosum and prior to venepuncture. The preparation is also an effective pain reliever when used on certain ulcerations.

Key words: Topical anesthesia; Anesthetic cream; Lidocaine; Prilocaine; Skin surgery

When injecting a local anesthetic, pain is produced by the needle's penetration and by the deposition of the anesthetic solution, which is a problem especially in children and in the genital area in adults. Infiltration of large areas can also be a problem.

In a previous study we found that, using the pinprick technique, a 10% eutectic mixture of lidocaine and prilocaine base produced more effective skin anesthesia than each base alone in the same total concentration (1). The reason for the greater effectiveness of the eutectic mixture composition, compared with the individual active components, is the higher concentration of the local anesthetic bases in the emulsion droplets (80% versus 20%).