

TREATMENT OF VARIOUS DERMATOSES BY INTRALESIONAL INJECTION OF TRIAMCINOLONE ACETONIDE — A CLINICAL TRIAL OF 23 CASES

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This comparatively new method of treatment has been used in various centres, with satisfactory results in the last two to three years. Conditions which are suitable for treatment are lichen planus, lichen simplex chronicus, discoid lupus erythematosus, granuloma annulare, alopecia areata, alopecia totalis, psoriasis, sarcoid of Boeck, keloid, eczema of various types, acute dermatitis medicamentosa, chronic urticaria, eczema, localised neurodermatitis, and a few others.

In most of these conditions there has been a good measure of improvement in the lesions so treated, as reported by the various workers (Ref: Weidman A.L. (1963), James A.P.R. (1961), Hollander A. (1961), Sexton G.B. (1960), Booth B.H. (1961), Gombiner A. (1961), Readett M.D. (1961), Pelzig A. and Baer R.L. (1960), Cohen H.J. and Baer R.L. (1960), Rebello D.J.A. (1962), Ferguson Smith J.F.C. (1962), Rowell N.R. (1962). In all these reports the technique has been basically the same, and side effects both general and local have been very few. The present trial is an attempt to evaluate this method of treatment in our cases suffering from various dermatoses.

METHOD

Patients with localised skin lesions were selected, and wherever possible the lesions were paired for comparison. Triamcinolone Acetonide (Kenacort-A, Squibb) which is supplied in bottles containing 10 mg per ml. was diluted so as to give a concentration of 2.5 mg per ml; and this diluted Triamcinolone acetonide was then injected into the lesions by using a one millilitre tuberculin syringe, and a fine hypodermic needle. Intralesional injections were made in adjacent areas so as to include the whole lesion if possible.

The patients acted as their own control for certain lesions or those lesions on the contralateral side of the body were not treated

in this way, thus enabling a comparison between the treated and untreated areas. If there was only one sizable lesion, half of the lesion was treated, while the other half was not. Injections were given once a week, for 4 weeks, after which the results were observed by the same person. No attempt was made to determine the duration of any improvement observed at the end of the 4 weeks.

RESULTS

These are shown in Table I.

DISCUSSION

Some local pain and slight discomfort were experienced in this trial. However the pain passed off very quickly. There was no generalised reaction.

This does not mean that the procedure is completely harmless, although it can almost certainly be said to be a safe procedure in clinical practice.

Many other workers have reported side reactions, but all agree that these are rare. Local reactions reported by Goldman (1962) have been: (1) Pain and discomfort. (2) atrophy (3) secondary infection (4) haemorrhage (5) pigmentary changes. (6) hypersensitivity reactions (7) panniculitis. If these local reactions were uncommon (less than 0.5%) systemic reactions were even rarer—being less than 0.1%. In one case reported by Goldman, they consisted of anxiety, diffuse pain in upper chest, and transient profuse sweating. There was however no sequelae, and the systemic effects passed off. Adrenal suppression from intradermal triamcinolone has been reported and deserves closer attention (McGugan et al 1963).

McGugan and co-workers (1963) showed that a single injection of 75-100 mg. triamcinolone acetonide induced adrenal suppression as measured by a decrease in plasma cortisol

TABLE I

Case No.	Age	Sex	Race	Clinical Diagnosis	Duration of Disease	Result After Intra-Lesional Triamcinolone Acetonide
1.	35	F	Ch.	Keloids on Chest	5 years	0
2.	60	F	Ch.	Chronic lichen simplex	1 year	+
3.	53	F	Ch.	Lichen Planus	3 months	++
4.	20	F	Ch.	Chronic lichen simplex on legs	3 years	+
5.	60	F	Ch.	Neurodermatitis with lichenification on legs	2 years	+
6.	33	M	Ind.	Lichen Planus on prepuce	3 years	++
7.	30	M	Ch.	Neurodermatitis on back of neck	8 years	+++
8.	25	M	Mal.	Lichen simplex chronicus on back of neck	2 years	+++
9.	40	M	Ind.	Neurodermatitis on dorsum of right foot.	2 years	+++
10.	35	M	Mal.	Chronic lichenoid dermatitis	3 years	0
11.	17	M	Ch.	Boeck's Sarcoid on left leg	1 month	+
12.	29	F	Ind.	Chronic Eczematous dermatitis of feet	7 years	+++
13.	41	F	Ch.	Lichen simplex chronicus on dorsum of feet	5 years	++
14.	26	M	Mal.	Chronic lichen simplex on back of neck	3 years	++
15.	28	F	Ch.	Eczematous Dermatitis	7 months	++
16.	37	F	Ind.	Vericose eczema	6 years	++
17.	33	M	Ch.	Discoid lupus erythematosus	5 years	++
18.	26	F	Ch.	Alopecia areata	1 month	++
19.	14	M	Ch.	Alopecia areata	6 months	++
20.	31	M	Ch.	Alopecia areata	6 months	++
21.	41	M	Ch.	Alopecia areata	1 year	++
22.	30	M	Ch.	Alopecia areata	2 weeks	+++
23.	8	F	Ch.	Alopecia areata	2 years	+

F = Female
M = Male

Ch. = Chinese
Ind. = Indian
Mal. = Malay

Results: 0 = no change
+ = slight improvement
++ = moderate „
+++ = marked „

concentration which persisted up to 4 or more days; but in contrast, an injection of 25 mg triamcinolone diacetate or 50 mg triamcinolone acetonide produce only an occasional transient adrenal suppression. It was concluded therefore that 25 mg or less of triamcinolone diacetate should be a safe dose. Therefore it was our practice in this trial to keep the total dose of triamcinolone acetonide, given in each week, below 25 mg.

Of the 23 cases treated 5 cases (21.7%) showed marked improvement.

11 cases (48%) showed moderate improvement and 5 cases (21.7%) showed slight improvement. Only 2 cases including a case of keloids and one of chronic lichenoid dermatitis were classed as failures. The duration of the lesion has no bearing on the response, for the cases showing marked improvement varied from 2 weeks history to 8 years. It is interesting to note that marked to moderate improvement had occurred in lesions of 7 cases with an average history of 4-3 years. Of the 6 cases of alopecia areata treated, all but one showed moderate to marked improvement. The single exception had a history of 2 years and even in her case some improvement was noticed. Of the 8 cases of lichen simplex chronicus and neurodermatitis treated 3 showed marked improvement, 2 showed moderate improvement after treatment.

CONCLUSION

The use of intralesional triamcinolone in the treatment of chronic dermatoses has been shown to be effective in this carefully selected series of 23 cases.

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