

COMPARISON OF DESOXIMETASONE AND HYDROCORTISONE BUTYRATE IN PSORIASIS

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Abstract. Thirty psoriatics were treated for 2 weeks on a double-blind controlled basis with desoximetasone (0.25%) and with hydrocortisone butyrate (0.1%). It was a randomised left-right comparative trial. Thirteen out of 27 patients preferred desoximetasone, 3 patients preferred hydrocortisone butyrate. There was also a significantly better effect of desoximetasone as judged by the observer after the second week of treatment.

Key words: Psoriasis; Comparative study; Desoximetasone; Hydrocortisone butyrate

Topical steroids are still the most widely used drugs for the treatment of psoriasis and numerous preparations are available. Whereas until recently great efforts were made to find ever more potent steroids, it is now realized that topically administered steroids are just as liable to cause unwanted side effects as are those that are systemically administered (3, 7). Many endeavours have been made to produce drugs which are as effective as the fluorinated steroids, yet have fewer side effects (1, 9). Nevertheless, it remains an open question whether these drugs are sufficiently potent for the treatment of psoriasis. In the present study one of these drugs, hydrocortisone butyrate cream, was compared with a new synthetic steroid, desoximetasone.

METHODS AND MATERIAL

Desoximetasone (9 α -fluoro-11 β -21-dihydroxy-16 α -methylpregna-1,4-diene-3,20-dione) designation A 41304; Ibaril®x; Hoechst AG, Frankfurt a. M., West-Germany) was used in a concentration of 0.25% in a water/oil emulsion without additives. Commercial hydrocortisone butyrate was chosen for comparison. Both steroids were packed in identical tubes which were coded randomly.

Thirty psoriatics were treated on a double-blind controlled basis using identical bilateral lesions. The applications were made twice daily without occlusion. Patients already on topical steroids were given one week's pre-treatment with cold cream prior to the trial. Erythema, induration, scaling, pruritus and pustulation were judged prior to treatment and following one and 2 weeks' treatment and were graded using a one to four scale. The patients' preference was noted after 2 weeks' treatment. Statistical examination was carried out by χ^2 -test.

RESULTS

Twenty-eight patients were evaluated after one week and 27 patients completed the study. The

Table I. *Gradings in 27 patients who completed treatment with desoximetasone*

Symptoms	Prior to treatment	After one week	After two weeks
Erythema	2.96 \pm 0.18	2.15 \pm 0.35	1.87 \pm 0.32
Scaling	2.93 \pm 0.37	2.02 \pm 0.38	1.56 \pm 0.39
Induration	2.27 \pm 0.50	1.85 \pm 0.51	1.50 \pm 0.40
Pruritus	1.78 \pm 0.54	1.15 \pm 0.20	1.15 \pm 0.20
Pustulation	1.00 \pm 0	1.00 \pm 0	1.00 \pm 0

Table II. *Gradings in 27 patients who completed treatment with hydrocortisone butyrate*

Symptoms	Prior to treatment	After one week	After two weeks
Erythema	2.96 \pm 0.26	2.26 \pm 0.42	2.07 \pm 0.32
Scaling	2.59 \pm 0.39	2.26 \pm 0.42	1.89 \pm 0.39
Induration	2.30 \pm 0.44	2.00 \pm 0.54	1.77 \pm 0.41
Pruritus	1.81 \pm 0.80	1.22 \pm 0.32	1.19 \pm 0.30
Pustulation	1.00 \pm 0	1.00 \pm 0	1.00 \pm 0

vulgaris. It is given by mouth. It is safe, non-toxic and virtually without side effects (10). Its serum half-life is around 8.7 hours and it is not protein-bound (6). Yet these pharmacologic qualities cannot be taken advantage of, for the work described here confirms the recent observation by Chow et al. (1) of metronidazole resistance in *P. acnes* and makes the prospects for the successful use of this drug in acne remote.

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