COMPARISON OF DESOXIMETASONE AND HYDROCORTISONE BUTYRATE IN PSORIASIS

Hugh Zachariae

From the Department of Dermatology, Marselisborg Hospital, University of Aarhus, Aarhus, Denmark

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, three 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.

RESULTS

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

Table I. Gradients in 27 patients who completed treatment with desoximetasone

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Prior to treatment</th>
<th>After one week</th>
<th>After two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erythema</td>
<td>2.96±0.26</td>
<td>2.26±0.42</td>
<td>2.07±0.32</td>
</tr>
<tr>
<td>Scaling</td>
<td>2.59±0.39</td>
<td>2.26±0.42</td>
<td>1.89±0.39</td>
</tr>
<tr>
<td>Induration</td>
<td>2.30±0.44</td>
<td>2.00±0.34</td>
<td>1.77±0.41</td>
</tr>
<tr>
<td>Pruritus</td>
<td>1.81±0.80</td>
<td>1.22±0.32</td>
<td>1.19±0.30</td>
</tr>
<tr>
<td>Pustulation</td>
<td>1.00±0</td>
<td>1.00±0</td>
<td>1.00±0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Symptoms</th>
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<th>After one week</th>
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</tbody>
</table>

METHODS AND MATERIAL

Desoximetasone (9α-fluoro-11β,21-dihydroxy-16α-methylpregna-1,4-diene-3,20-dione) trial designation A 41304; Ibaril®; 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.


vulgaris. It is given by mouth. It is safe, non-toxic and virtually without side effects (10). Its serum halflife 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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R. M. Bannatyne, M.B.
Department of Bacteriology
The Hospital for Sick Children
555 University Avenue
Toronto, Ontario M5G 1X8
Canada

COMPARISON

Abstract. Thirty psoriasis vulgaris patients were enrolled in a double-blind controlled trial using 1% urea (0.25%) and with hydrocortisone 21-acetate and hydrocortisone 21-butyrate in a randomised left-right comparison. At the end of treatment, 27 patients preferred desoximetasone, 12 patients preferred hydrocortisone butyrate. The desoximetasone group had a better effect of desoximetasone compared to hydrocortisone butyrate after the second week of treatment.

Key words: Psoriasis; Comparative trials; Hydrocortisone 21-acetate; Hydrocortisone 21-butyrate.

Topical steroids are still the mainstay of treatment for the treatment of psoriasis. Many different preparations are available. When the first synthetic steroids were made, it was realized that these steroids were just as liable to produce side effects as are those that were administered from natural sources (3, 7). Many attempts were made to produce drugs which were more potent than the natural steroids, yet had fewer side effects (9). Nevertheless, it remains a problem to determine whether these drugs are superior to previously available treatment of psoriasis. In this study, we compared the effectiveness of these drugs, hydrocortisone 21-acetate and hydrocortisone 21-butyrate, with desoximetasone when compared with a new synthetic corticosteroid.

METHODS AND MATERIALS

Desoximetasone (9α-fluoro-11β, 17α, 21-trihydroxy-1, 20a-dihydroxy-11β, 21-dione triacetate; Ibaril 46; Hoechst AG, Frankfurt) was used in a concentration of 0.1%. The solution was used in identical tubes which were contaminated with 0.1% of the respective antioxidant, sodium metabisulfite.