favorable results. We felt that with topical zinc therapy, the concentration of zinc could be significantly increased at the target organ, the sebaceous gland, with little systemic complication. This decision was based on the fact that zinc sulfate is known to be readily absorbed through the pilosebaceous apparatus. The average daily topical dose applied in this investigation was 20 mg, which corresponds approximately to the minimum daily requirement for zinc. Even if totally absorbed, this would not constitute a significant zinc body burden. This supplement to total body zinc would therefore allow only for a maximal local effect and a minimal systemic addition. This was apparent by the fact that there was not a significant increase in the zinc serum level over time for any of the patients.

Of considerable interest was the increase in the irritation index that accompanied zinc treatment. Evidence of a direct toxic effect, such as tissue necrosis, fissuring, blistering, or hyperpigmentation, was not apparent. The elevated degree of irritation noted in this investigation for topical zinc therapy could be, in part, to the enhanced conversion of linoleic acid to prostaglandin in the presence of zinc. Increased prostaglandin metabolism may, in fact, be responsible for the vasodilatation and hence the erythema, scaling, burning, and itching noted in the patients adhering to the topical zinc supplementation. Lotia alba, which contains concentrations of zinc sulfate similar to those used in this investigation, has been utilized for decades in the treatment of acne vulgaris. A possible explanation for the efficacy of lotia alba is a beneficial synergism or potentiation between the zinc sulfate and the sulfurated potash.

As noted in this study, zinc sulfate in a vehicle of water, propylene glycol, and ethanol was of little benefit in degrading comedone counts on patients. At present, a high percentage of dermatologists prescribe oral zinc therapy for some of their acne patients, despite conflicting evidence of its effectiveness. This study demonstrates that there appears to be little obvious beneficial value in topical zinc therapy alone for patients with acne vulgaris.

Drug Name

tretinoin: Retin-A

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Bullous Pemphigoid

Bullous pemphigoid is usually treated by high doses of corticosteroids. This treatment is effective in most cases, but unwanted side-effects are common. The addition of immunosuppressive drugs has been proposed for the more severe forms of the disorder but their efficacy has not been demonstrated. The postulated pathogenetic mechanisms involved in bullous pemphigoid and the side-effects associated with the conventional treatment justified a trial of plasma exchange. Isolated cases, usually resistant to corticosteroids, in which plasma exchange appeared effective have been reported. Plasma exchange has also led to the control of a few cases without any associated therapy. However, a rebound in antibody titre has been noted after plasma exchange in other cases in which no corticosteroids or immunosuppressive drugs were given concurrently. The potential value of plasma exchange would be to reduce the doses of these therapeutic agents and their side-effects rather than to replace them entirely.—Rovjeau J-C, Guillawme J-C, Morel P, et al. Plasma exchange in bullous pemphigoid. Lancet. 1984;2:486.
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