Topical Glucocorticoids with Increased Benefit/Risk Ratio

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Topical Glucocorticoids
with Increased
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The introduction of a topical glucocorticoid, i.e., hydrocortisone, into the treatment of inflammatory skin disease by Sulzberger and Witten in 1952 provided a major pharmacologic breakthrough. In fact, we distinguish two eras of dermatologic treatment, i.e., before and after 'cortisone'. However, it was clear early that hydrocortisone and hydrocortisone acetate alone would not suffice as adequate treatment for all types of inflammatory skin disease. Fortunately, other glucocorticoids such as fluorinated congeners offered additional potency. Yet as early as in 1964, Epstein et al. described 'atrophic striae' due to the application of triamcinolone acetonide; many other local adverse effects have subsequently been documented. Even more potent glucocorticoids, e.g., clobetasol propionate, gave us still more efficacy. However, this was linked to more and more severe adverse effects both of the local and the systemic type.

For decades topical glucocorticoids represent the class of topical dermatics most often used, and, in fact, it is not mainly hydrocortisone that is prescribed in daily practice but the more potent congeners. Thus it does not come as a surprise that today the typical adverse effects due to topical glucocorticoids are well known to patients. In fact, some are so scared that the term 'corticophobia' has been proposed. An exaggerated fear of topical glucocorticoids in general, however, can have severe consequences if, for example, severe atopic eczema which can lead to growth retardation is not adequately treated in childhood.

In recent years it has been a challenge both to the chemists and the dermatologists to develop glucocorticoids which are potent but to at least a lesser extent linked to systemic and/or local unwanted effects.

Several years ago, prednicarbate became available, and since the early days of its clinical application, some dermatologists shared the belief that this compound might be different. Chemically, it can be considered a nonhalogenated double-ester type glucocorticoid. More recently, further substances of this type have been synthesized and offered to the clinician. These compounds are not derived from prednisolone but from hydrocortisone. Reflecting their chemical structures they have been named hydrocortisone aceponate and hydrocortisone buteprate. Nevertheless, up to the present, some students of the field still believe
that topical glucocorticoids only differ in potency.

A comprehensive monograph on the broad field of 'topical corticosteroids' in general was published recently [Maibach HI, Surber C (eds): Topical Corticosteroids. Basel, Karger, 1992]; the present volume focuses on its subject in a more limited sense. Thus it can be concise; this makes the editors hope that it will be read by many dermatologists - not only those in research but also those in clinical practice. This might spread information on a new approach which may offer the possibility of decreased adverse effects.

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