Drug Treatment of Disease

CORTICOSTEROIDS IN TREATMENT OF SKIN DISEASES

II. LOCAL APPLICATION*

BY

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It often happens, particularly in eczematous eruptions, that a lesion which is not sufficiently large or disabling to justify systemic treatment may derive much benefit from the local application of steroids. As a general rule, it is chiefly within the eczema-dermatitis group that favourable results are to be achieved, and they may sometimes be very dramatic. In many cases there is an element of bacterial infection, and for this reason antibiotics are often incorporated with steroids in ointments and lotions. It is to be expected that A.C.T.H. will not exert this local effect, since its action is on the suprarenal and not directly on the skin. Cortisone also has no useful local effect when applied to the skin surface. Potent local anti-inflammatory effect is, however, produced by the application of hydrocortisone, 9 α -fluorohydrocortisone, and prednisolone.

Presence of Infection

Many drug houses have their own preparations of these substances for local application. Although in individual cases one preparation may prove to be better than another, in general there is not much to choose between them. In selecting a steroid for local application it is more important to consider whether or not infection is present, indicating the need for an antibiotic, or whether to order a lotion or an ointment. Lotions are cleaner to use; they spread more easily, and are therefore more economical. On the other hand, ointments are probably more effective. If an ointment is to be used, the choice may be made between greasy and non-greasy bases. Probably most patients prefer a non-greasy base, particularly for ambulant treatment, but elderly patients are usually better when given an ointment with a greasy base; this also applies to patients with Besnier's prurigo and the allied forms of flexural eczema with which hay-fever and asthma are sometimes associated (atopic eczema).

When an antibiotic is incorporated in a steroid application, it is best to use an antibiotic with the widest antibacterial range, and one which is not likely to be required for systemic administration. Neomycin is the one most used for this purpose.

The local application of steroids is seldom harmful; with hydrocortisone, even when it is applied to large areas in high concentration, no evidence of systemic effect can be detected. The similar application of fluorohydrocortisone may be followed by some evidence of systemic action; this is observed only when large areas of skin are treated and the systemic effects are slight. Though these effects are of some academic interest, they seldom have a practical significance.

Occasionally an eruption becomes worse after the application of steroids, but in these rather rare cases

the aggravation is more likely to be due to the vehicle than to the active ingredient. Antibiotics carry the risk of sensitization, and it is therefore better not to use them unless an infective element is clearly present.

With very few exceptions, therefore, the only contraindication to local therapy is the high cost of these substances. This is a consideration which should not be despised, for the price of steroid treatment is very high: 1% hydrocortisone ointment costs about 200 times as much as the same weight of zinc cream.

Unpredictable

The local anti-inflammatory effects of the steroids have not proved entirely predictable. For example, their ineffectiveness in psoriasis remains unexplained and their value in relieving the itching of "essential" pruritus ani is difficult to understand. Because of this, though experience has made fairly clear by now what results are to be expected, it is still often justified to make a trial of steroid applications as a therapeutic experiment. There are certain reservations to this: first, that the old-established and cheaper applications should be tried first; and second that, if the steroid is continued over a period of several weeks, repeated attempts should be made to substitute a weaker concentration or a cheaper non-steroid application. The latter proviso is made because it often seems that a lesion which at first would respond only to steroid will often be found later, especially after some improvement has taken place, to do just as well on simpler remedies. Third, a trial of this sort need last only about a week; a steroid application, if it is going to do good, will produce convincing benefit within a few days. If it does not do this, it may as well be abandoned.

Finally, there are many common dermatoses in which local steroid treatment has already been thoroughly explored and found to be unhelpful, so that further therapeutic trial is likely to be only a waste of money. In this category fall all cases of acne vulgaris, all kinds of baldness, including alopecia areata, ringworm infections, psoriasis, impetigo, warts, and vitiligo. No doubt benefit is occasionally seen in individual cases, but this is attributable to the natural progress of the disorder or to other factors such as the emollient property of the ointment base. One is apt to forget how astonishingly well some patients improve with simple local applications.

Variation in Susceptibility

Before we consider the disorders in which steroid applications are likely to be helpful, mention may be made of the variation in susceptibility of different parts of the body to this form of treatment. Eruptions on the

*Part I appeared in last week's issue.

face and neck are very easily influenced, lesions around the eyelids especially. The skin of the anogenital region also responds readily. A comparable eruption on the hands and feet may be much more difficult to influence, and indeed on the extremities steroid treatment has comparatively little to offer.

The ointment or lotion may be applied very sparingly and should be well rubbed in. Twice-daily applications are often sufficient, but occasionally better results follow thrice-daily use. More frequent or liberal applications do not seem to have any advantage. The treated part may be covered with a dressing if friction from clothing is likely to remove the steroid, but otherwise it may be best not to cover the area.

Eczema-Dermatitis

It should be emphasized that in the proper management of these cases the identification of the causal mechanism should be the first step. If this can be removed or successfully treated a quick recovery can be expected. The suppression of symptoms with steroids should not lead to neglect of this important principle.

When systemic treatment is strongly contraindicated in cases of generalized dermatitis local treatment with hydrocortisone may be considered. There are not many cases, however, where the expense can be justified, for it is possible to spend a few pounds daily in this way.

In cases of localized eczematous eruption, whatever the origin, hydrocortisone lotion or ointment is likely to bring benefit. Most often the 1% strength is used, but in some severe or resistant cases 2½% ointment may be preferable; there are other cases in which ½% or ¼% is adequate.

Intertrigo and the intertriginous eruptions of the kind usually called seborrhoeic or infective eczematoid dermatitis and which particularly affect the ear region, the axillae, and the groins, are difficult to treat and may do very well with a combination of antibiotics and steroid.

Atopic Eczema

Steroid applications are the most effective in infantile eczema and in the atopic dermatitis of older subjects. Because of the chronicity and the large areas to be covered, it is customary to retain tar ointments as the routine treatment and to use steroids for the worst phases, particularly about the face and neck. A combination of tar and steroid may be valuable here. These cases nearly always do best with a greasy ointment base.

Localized Pruritus

Pruritus vulvae and pruritus ani are usually greatly benefited by steroid ointments or lotions. The effect of the steroid tends to be transient, and itching often returns within a day or so if treatment is stopped. This is indeed the treatment of choice for those cases of perineal pruritus without any primary visible eruption or other primary disease. Twice-daily application should continue, although itching has ceased, over a period of several months. An antibiotic may be indicated if secondary infection is present.

Otitis externa also will usually respond well to the local application of steroid ointment, continued over several months in order to avoid relapse.

ACCIDENT SERVICES

AUTUMN MEETING OF BRITISH ORTHOPAEDIC ASSOCIATION

[FROM A SPECIAL CORRESPONDENT]

A symposium on Britain's accident services was the main feature of the 41st meeting of the British Orthopaedic Association, held under the presidency of Mr. NORMAN CAPENER at the Royal College of Surgeons on October 23 and 24. The discussion was based on the association's recent memorandum on accident services, and the problem was approached from the administrative, legal, and medical aspects.

Type of Service

Dr. C. T. MAITLAND (formerly of the Ministry of Health) said he did not favour isolated accident services, but thought they should form part of the general medical service. The problem of providing adequate accident cover throughout the country was difficult. During the war the mode of dealing with injuries changed. Centres were set up for dealing with special types of injury, such as those involving the head or chest, or for injuries requiring plastic surgery, to mention a few. Whereas this system was efficient in time of war, it tended towards over-specialization in peace.

At present much good work was being done at local centres, but no overall system for accident treatment had yet been devised for the whole country. Such a service presented many difficulties. It would be difficult to get a high standard of treatment everywhere. The Registrar-General's figures showed that injuries were more frequent in rural than in urban areas, and whatever form of accident service was proposed it must take into account this dispersal of population. It was simple to devise a service for the large centres but hard to know what to do at the periphery. The position was complicated by the fact that many parts of the body might be involved, and an accident service must be capable of dealing with every contingency. Orthopaedics alone could not do this. If life was to be saved in cases of serious injury the facilities for so doing must be available for 24 hours of each day in the areas where accidents were most common. Reorganization would inevitably cause some doctors inconvenience, but change must come. It would be wrong to turn the central accident units into great emporia for the mass treatment of injuries. It was better that they should become centres for the training of those who must do the bulk of the work at the periphery, where more use should be made of the smaller hospital and even of the cottage hospital.

Legal Position

Mr. NORMAN J. SKELHORN, Q.C., discussed some of the legal problems which may beset an accident service. He said that the legal position of the junior medical staff must receive consideration. Accidents often gave rise to severe and multiple injuries, and the assessment of their gravity and extent called for greater experience and more specialized training than a recently qualified house officer could be expected to have. It was true that he could seek the assistance of his seniors, but, quite apart from the question of such assistance being immediately available, this presumed that the junior medical officer was able to recognize the possible significance of the signs and symptoms, and the potential severity of the injuries might call for greater skill than he possessed. While appreciating that all cases could not be treated by senior members of the staff, and recognizing the difficulties in providing detailed supervision, Mr. Skelhorn felt there was at present a tendency to cast upon the newly qualified and comparatively inexperienced doctor greater responsibility than he could bear.

The law had to hold a balance, on the one hand, between the right of the patient to skilled and competent treatment,