Today's Treatment

Diseases of the Skin

Management of Eczema—I

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Eczema is a form of inflammation of skin, but is a reaction pattern rather than a specific disease, and hence synonymous with "dermatitis" and "eczematous dermatitis." Correct treatment obviously depends on accurate diagnosis, and the doctor will avoid errors if he bears the following simple facts in mind.

(1) The prime symptoms of eczema are itching and "weeping" of the skin. Impetigo, tinea, and herpes are the only other common lesions which may cause both symptoms. Itching may merge into pain and "soreness."

(2) The epidermis never appears normal. Characteristically the acute eruption is a uniformly distributed pattern of papulovesicles on an erythematous and urticated base (in contrast to the grouped papulovesicles of herpetic eruptions). In subacute and chronic eczema, vesicles and "weeping" may be absent but epidermal thickening and scaliness are present.

(3) The distinction between endogenous and contact patterns of eczema is very important, if the doctor is to give his patients the proper advice. Eczema of the backs and sides of the fingers and hands, the wrists and forearms, eyelids and genitalia is highly suggestive of the contact type. Even so, many other contact patterns are seen affecting, for instance, the feet (due to shoes) or trunk (due to clothing). Eczema of the popliteal and antecubital fossae (especially if it began in childhood), the palms, and the insteps of the soles is likely to be endogenous. The doctor needs to know about the patient's occupation and hobbies, as well as any recently used topical medicaments, if he is to be able to exclude contact eczema.

Principal Patterns

Since their management varies, the principal patterns of endogenous eczema will be defined so that they can be mentioned without confusion later in the article.

Atopic.—A genetically determined pattern, which will be covered in a later article in this series.

Asteatotic Eczema.—A form of dry, fissured eczema seen mainly in old people and in dry winter weather.

Neurodermatitis (Lichen simplex chronicus).—A chronic form of eczema, commoner in women, and often localized to characteristic sites—namely the nape of the neck, upper ulnar forearm, the legs, and anogenital regions. The affected areas are well defined and appreciably thickened and, when asked, the patient admits that he habitually rubs and scratches them, and also that he is under some emotional stress.

Seborrhoeic Eczema.—This is seen in adults, in its dry form affects the scalp and midlines of the upper chest and back, in its moist form the scalp and body flexures; in the latter form infection is present. The term is also used for a non-itching flexural eruption of infancy, which may or may not be the same disease.

Hypostatic Eczema.—This affects the lower legs in association with local chronic venous insufficiency. It may be associated with oedema, purpura, golden brown staining of the skin (due to haemosiderosis), ulceration, varicose veins, or spontaneously developing patches of white cutaneous atrophy.

Nummular (Discoid) Eczema.—This pattern is little understood, but is usually but not always endogenous, is seen in adults, and is characterized by chronic or recurring discs of eczema, especially on the arms and legs.

Recurrent Summer Pompholyx.—Perhaps because of the thick stratum corneum on the skins of the palms and soles, the appearance of eczema may be modified at those sites—with a bubbling appearance like sago grains. Pompholyx eczema may be chronic, but a recurrent acute form is particularly common in summer—in which gross blistering occurs which may be completely disabling. Rarely, acute inflammatory tinea of the feet causes pompholyx of the hands.

Pityriasis Alba.—This is an ill-understood chronic low-grade dry form of eczema, most commonly seen on the face, usually in children.

Three other common conditions need to be mentioned. Scabies may be eczematized and the implications of missing the underlying infestation are obvious. Pityriasis rosea may also be eczematized, but the "herald patch" and centripetal distribution of this curious disease provide the clues to diagnosis. Tinea may simulate eczema or may have an eczematous component—especially on the feet and in the male groin. The possibility of ringworm infection should not be forgotten, especially with unilateral eruptions of hand or foot.

Treatment

If the eczema is not obviously impetiginized (that is, secondarily infected with Gram-positive cocci), the patient may be firmly assured that he or she is not contagious and is no threat to others; this instantly relieves any anxiety on this score. If contact eczema is diagnosed, and occupational factors are important—or are regarded as so by the patient—the doctor should choose his words carefully when he tells the patient the diagnosis. In this way he may prevent much future unhappiness for the patient and work for the medicosocial services stemming from compensation neurosis. Indeed, in any type of eczema, explanation and reassurance reap the same dividends as in all human disease.

AIMS

In eczema the doctor needs to bear the aims of therapy very clearly in mind. The likely time scale of treatment is impor-

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tant in choosing both systemic and topical agents. In precisely diagnosed allergic contact eczema, for instance, drug therapy will be needed for only a short time since withdrawal of the allergen quickly leads to cure. Much more important is the precise recognition of the allergen and education of the patient on its nature and distribution so that he can avoid it in all its guises in the future.

A medium-term view is correct for hypostatic eczema because controlling the oedema and the underlying venous insufficiency (for which long-term measures will be necessary) should prevent its recurrence. On the other hand, palliation is often all that can be done in chronic neurodermatitis because the cause of the underlying emotional stress—say, from domestic frustrations—is beyond the doctor's reach.

GENERAL PRINCIPLES

There are three main principles in treatment. Firstly, treatment cannot be successful unless its details are appropriate to the patient's intelligence, personality, and his domestic and working environments. Secondly, eczema is an inflammation and the importance of rest (local or general, as appropriate) in its management should not be forgotten. Thirdly, protection of the lesions (from clothing and the patient's finger nails) by bland applications and dressings will often bring about an improvement without any additional, potent drugs. The finger nails should be filed short and smooth, and kept scrupulously clean.

TOPICAL THERAPY

Therapeutic aims in topical treatment of eczema include one or more of the following: (1) protection; (2) cooling; (3) astringency; (4) antisepsis; (5) anti-inflammatory effect; and (6) rarely, removal of hyperkeratosis. The combination of measures chosen will clearly depend on site, severity, duration, age, occupation, and climate.

Protection

In low-grade chronic eczema simple protective applications may be of value. Lassar's paste (zinc and salicylic acid paste B.P.) or zinc compound past B.P., usually thinned by mixing with equal quantities of soft white paraffin, are the best. Paste-impregnated bandages are chiefly of value in childhood atopic eczema. In asteatotic eczema, Boots E.45 cream is a well-tolerated emollient, as is a urea-containing cream (Calmurid).

Cooling

Reducing the temperature of the skin raises the itching threshold. A cream allows water evaporation and hence surface cooling. A shake lotion (for example, calamine lotion) is less suitable since the residual powder causes subsequent dryness and discomfort.

Astringency

Weak solutions of potassium permanganate (1:8000 to 1:16,000) are of inestimable value in the initial treatment of acute exudative eczemas of the hands, feet, lower legs, and anogenital areas. Baths or local compresses for 10 to 15 minutes twice daily for two days, then once daily for no longer than a further three or four days, dry the "weeping" areas and have a valuable wide-spectrum antimicrobial action.

Temporary brown staining of the skin (and more resistant staining of the nails) is a minor price of this treatment. Permanganate never sensitizes. It is essential that the solution used should not be too strong and should not contain any undissolved crystals when applied; these may cause ulceration.

Antisepsis

The old basic dyes are now rarely used because they are so messy. Penicillin, sulphonamides, streptomycin, and chloramphenicol are avoided because they can induce allergic contact sensitivity. Chlortetracycline (Aureomycin) is the least sensitizing antibiotic when used topically, but—like the otherwise valuable iodoquinolines (clioquinol and chiniform)—it has the disadvantage of staining clothes and linen yellow. Neomycin is incorporated with steroids in many proprietary topical preparations and is valuable in staphylococcal infection, but the *Streptococcus pyogenes* is always resistant to neomycin and will be unaffected unless bacitracin or gramicidin are incorporated in the mixture.

Neomycin (and the closely related framycetin) have considerable sensitizing potential when used persistently on chronically eczematous skin and should not be used for the maintenance treatment of hypostatic eczema, chronic otitis externa, or anogenital eczema. Neomycin sensitivity is particularly insidious since when it occurs the eczema under treatment may spread only slowly or even simply fail to improve—though it may spread explosively with (presumably blood-born) lesions of the face and hands. Gentamicin has a spectrum of activity similar to that of neomycin and is much less likely to sensitize.

Any Questions?

We publish below a selection of questions and answers of general interest

Bread Storage

Are bread bins dangerous for the storage of bread? If so, how should loaves be stored in the home?

There is no known danger associated with the storage of bread in bread tins as bread will not support the growth of pathogenic bacteria. The problem is to prevent stored bread becoming unpalatable. Ideally, bread should be kept in an atmosphere in which the bread neither gains nor loses moisture. If the humidity is too high, mould will grow and if it is too low the bread will dry and become hard.

A bread tin is suitable for bread storage but it should be

well ventilated and not have an air-tight lid, kept dry, and kept free from crumbs. The tin should be washed weekly with hot soapy water; a little vinegar in the rinsing water is an extra precaution against mould.

Wrapped bread should be left in its wrapper, and may be kept in a polyethylene bag, folded loosely under the loaf to allow air to circulate, and placed in the bread bin, or on a shelf in the pantry. Storage of bread in a refrigerator is not advisable as bread then stales rapidly. However, a refrigerator retards the mould growth and its use for storage is perhaps better than a damp pantry. Bread keeps very well in a deep freeze when it should be wrapped in a polyethylene bag and sealed tightly.