

Hand Eczema

Differential diagnosis

- Atopic eczema
- Phyto (plant) or photodermatitis
- Pompholyx (v itchy vesicles)
- Psoriasis
- Tinea
- Exogenous eczema
 - Contact irritant eczema
 - Due to substances coming into contact with the skin, usually repeatedly, causing damage and irritation.
 - Such substances include
 - water
 - detergents
 - shampoos
 - household cleaning products
 - vegetable (especially potato and tomato) and meat juices
 - Contact allergic dermatitis
 - Due to type IV (delayed) allergic reaction to a substance that comes in contact with the skin
 - Contact allergy requires repeated exposure to the allergen, often taking weeks or even years to develop
 - Thus contact allergic dermatitis is usually caused by something that has been used previously without causing a problem

All types of endogenous and exogenous eczema can present with either 'wet' (blistering and Weeping) or 'dry' (hyperkeratotic and fissured) eczema

Treatment

Avoidance of irritants

Soap substitutes such as Dermol, Diprobase, Doublebase or Epaderm should be used

Gloves e.g. household PVC gloves should be used for wet work such as dishwashing and hair washing

Gloves may also be required for dry work e.g. gardening, dusting.

Friction

Rough materials and surfaces and the use of hand tools will also damage the skin barrier

Appropriate protective gloves should be worn whenever possible

Emollients

These should be applied frequently

There are a variety of emollients available that vary in their degree of greasiness

Different patients will prefer different preparations

Do not use Aqueous cream as a leave on emollient

Topical Steroids

The strength of topical steroid required varies from case to case

However, often it is necessary to use a potent topical steroid short term e.g. for 4 weeks

When in remission step down to 2x per week to prevent relapse

Prescribe a cream formulation if 'wet' and ointment if 'dry'.

Potassium permanganate (Permitabs)

1:10000 soaks, (1 tab in 8 litres of water) in old washing up bowl, for fifteen minutes daily for acute wet eczema until blistering weeping has dried

Clear nail varnish may be applied before using potassium permanganate to reduce staining of the finger nails.

Antibiotics (topical/systemic)

Exclude secondary infection and treat if appropriate

Secondary infection, usually with staphylococcus aureus, may present as sudden worsening of the dermatitis with yellowish exudate and crusts or pustules

Take a swab for culture and sensitivity

Since bacterial resistance to topical antibiotics occurs quickly, systemic antibiotics are preferred

Therapeutic tips

Other skin conditions can mimic eczema and should be kept in mind

e.g. if "eczema" is present on only one hand a fungal infection needs to be excluded by taking skin scrapings for mycology

It is usually worth examining the patient's skin all over as this can provide clues to other diagnoses e.g. plaques in extensor distribution in psoriasis, scabetic nodules

If contact dermatitis is suspected

- Take a careful occupational and social history
- the patient will require patch testing

Patch Testing

- **is only of value in the investigation of contact allergic dermatitis**
- **is of no use with type 1 reactions** (e.g. food allergies causing anaphylaxis / urticaria / angioedema)

In practice the cause of eczema is often multifactorial with external factors precipitating eczema in a constitutionally predisposed individual

Excellent hand care is the most important part of treatment

The use of gloves and moisturising creams must be continued for months after chronic hand dermatitis has apparently settled so that barrier function can be restored

Referral criteria

- contact allergic dermatitis will need patch testing
- severe chronic hand eczema which has failed primary care management as described
 - please detail what treatments have failed