ANTIBIOTIC GUARDIAN

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NHS Vale of York Clinical Commissioning Group

Referral Support Service

Dermatology

D08
Hand Eczema/Dermatitis

Definition

Differential diagnosis

- Atopic eczema
- Pompholyx - very itchy vesicles, often on the lateral borders of the fingers
- Psoriasis
- Phyto (plant) or photodermatoses
- Tinea, (especially if unilateral symptoms)
- Scabies

Exogenous eczema:

- Contact irritant eczema -
  usually due to a substance coming into contact with the skin, often repeatedly, causing damage and irritation. Common causes are water, detergents, baby wipes, facial cleansing wipes, shampoos, household cleaning products, food (*e.g.* potato, onion, tomato, citrus fruits or meat juices).
- Contact allergic dermatitis -
  Due to type IV (delayed) allergic reaction. Contact allergy requires repeated exposure to the allergen, often taking weeks or even years to develop, thus contact allergic dermatitis is often caused by something that has been used previously without causing a problem.

Exclude Red Flag Symptoms

- **Consider infection and treat with antibiotics if appropriate, as per the North Yorkshire Antibiotic Guidance for Primary Care May 2019**
- If a 1 week course does not produce an adequate response, continue for 2 weeks in total.

Management

- **Soap substitutes/emollients**, as per the CCG emollient guidance, should be used, both instead of soap and as a leave-on moisturiser.
  - Discuss buying small quantities OTC to encourage use out of the house-can be cheaper than a prescription charge.
  - Pump dispensers or tubes are best to avoid introducing infection into the emollient.
  - Any emollient is beneficial to treat dryness, patients vary in their preferences.
  - There is no evidence from controlled trials to support the use of one emollient over another therefore selection is based on the known physiological properties of emollients, patient acceptability, dryness of the skin, area of skin involved and lowest acquisition cost.
  - Avoid aqueous cream is no longer considered suitable as a leave-on emollient or soap substitute for diagnosed dermatological conditions due to its tendency to cause irritant reactions and availability of emollient creams with a lower acquisition cost.

    - Advise patients not to: smoke; use naked flames (or be near people who are smoking or using naked flames); or go near anything that may cause a fire while using emollients, emollients on clothing/bedding can cause a fire hazard. See MHRA warning for full advice.
- **Topical Steroids:**
    - The strength of topical steroid required varies from patient to patient.
    - However, often it is necessary to use a potent or very potent topical steroid short/medium term *e.g.* for 4 weeks.
    - Mildly potent — e.g. **hydrocortisone 0.1%, 0.5%, 1.0%, and 2.5%**
    - Moderately potent — e.g. **betamethasone valerate 0.025% (Betnovate-RD®) & clobetasone butyrate 0.05% (Eumovate®)**
    - Potent — e.g. **betamethasone valerate 0.1% (Betnovate®)**
    - Very potent — e.g. **clobetasol propionate 0.05% (Dermovate®)**
    - Quantities of topical corticosteroid required to treat a flare of eczema for 1 week in an adult (about half of this is needed for a child) - Both hands = 15–30 g
    - Aim to treat as soon as it begins to flare up for a quicker response.
    - Prescribe a cream formulation if 'wet' and ointment if 'dry', although patient preference is also important.
- All types of endogenous and exogenous eczema can present with either 'wet' (blistering and weeping) or 'dry' (hyperkeratotic and fissured) eczema.
- **Treatment**-needs to be continued long-term in many patients to prevent relapses
- **Avoidance of irritants**-avoid all possible ones as there can be several contributing causes.
- **Gloves** (household PVC gloves) should be used for wet work such as hair washing.
    - Washing up should ideally be done in cotton gloves inside a pair of rubber gloves to reduce/absorb sweat.
    - Gloves are often also required for dry work e.g. gardening, dusting and in winter to protect skin from irritants/environment.
    - Appropriate protective gloves should be worn whenever possible.
- **Reduce friction** - damages and dries skin and can increase pruritus.
- **Rough materials** and surfaces and the use of hand tools will also damage the skin barrier.
    - 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 and needs repeated reinforcement to the patient with development of good hand care routines long-term.
    - See below for PILs.
    - Use of gloves and moisturising creams must be continued for months after chronic hand dermatitis has apparently settled so that the barrier function can be restored. It can take at least 8 weeks for tiny fissures and cracks to heal once the skin looks normal and an exacerbation is more likely during this time.
- **Potassium permanganate** (**Permitabs**)
  1:10000 soaks, (1 tab in 8 litres of water) in old washing up bowl (because it will stain the 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 or apply Vaseline petroleum jelly to the nails before soaking.
- **Antibiotics (topical/systemic)**
- Consider secondary infection and treat if appropriate, as per the North Yorkshire Antibiotic Guidance for Primary Care
    - Secondary infection, usually with staphylococcus aureus, may present as sudden worsening of the dermatitis with yellowish exudate and crusts or pustules.
    - Consider a swab for culture and sensitivity.
    - Systemic antibiotics should be prescribed if there are signs of widespread infection or patients are systemically unwell. Patients that are immunocompromised or are taking immunosuppressant therapy may require antibiotics sooner.
    - Since bacterial resistance to topical antibiotics occurs quickly, systemic antibiotics are preferred.

- Topical antimicrobial, e.g. **Dermol®** may be used short-term for localised infected skin in patients that are not systemically unwell. This should be used in the acute weeping stage of the infection and will support drying of the area. As symptoms improve, consider switching to an emollient ointment for long-term use.
- See BNF for additional prescribing information.

- **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
- **Patch Testing**
  - If allergic contact dermatitis is suspected, take a careful occupational and social history.
  - Is only of value in the investigation of contact allergic dermatitis.
  - Is not of use with type 1 reactions (*e.g.* food allergies causing anaphylaxis / urticaria / angioedema

Referral Information

Referral Criteria

- Allergic contact dermatitis that may need patch testing.
- Severe chronic hand eczema, which has failed primary care management as described.

Information to include in referral letter

- Please detail what treatments have been tried and their response
- Occupational history and detail any relevant hobbies
- Photograph required – please refer to the CCG commissioning statement here
- Relevant past medical/surgical history
- Current regular medication
- BMI/Smoking status

Patient information leaflets/PDAs *(these may not represent local commissioning guidance)- from the British Association of Dermatology*

- Contact dermatitis- May 2017
- Hand dermatitis- August 2019
- Atopic eczema- February 2017

References

- CKS management of contact dermatitis in primary care- July 2018
- CKS guidance on eczema-atopic January 2018
- Guidance for eczema on hands and feet for medical professionals
- CKS management of impetigo- February 2020