Pompholyx factsheet

Pompholyx eczema (also known as dyshidrotic eczema/dermatitis) is a type of eczema usually affecting the hands and feet. In most cases, pompholyx eczema involves the development of intensely itchy watery blisters, mostly affecting the sides of the fingers, the palms of the hands and the soles of feet. Some people have pompholyx eczema on their hands and/or feet, with other types of eczema elsewhere on the body. This condition can occur at any age but is most common before the age of 40 years.

The skin is initially very itchy with a burning sensation of heat and prickling in the palms and/or soles. Then comes a sudden crop of small blisters (vesicles), which turn into bigger weepy blisters and can become infected, causing redness, pain, swelling and pustules. There is often subsequent peeling as the skin dries out, and then the skin can become red and dry with painful cracks (skin fissures). Pompholyx eczema can also affect the nail folds and skin around the nails, causing swelling (paronychia).

What causes it?

The exact causes of pompholyx eczema are not known, although it is thought that factors such as emotional tension, sensitivity to metal compounds (such as nickel, cobalt or chromate), heat and sweating can aggravate this condition. Fifty percent of people with pompholyx have atopic eczema as well, or a family history of atopic eczema. Pompholyx eczema can coexist with fungal infections, so assessment should include checking for the presence of any fungal infection on the hands and feet.

Pompholyx eczema occurs on areas of the body that we cannot avoid using – the skin here is more prone to exposure to potential sources of irritation and aggravation. For this reason, pompholyx eczema on the hands and feet can be very debilitating and difficult to manage. It can also cause problems with employment.

The hands and feet, where pompholyx commonly occurs, are areas of the body that are also prone to contact eczema. This can take one of two forms – irritant contact eczema or allergic contact eczema.

A reaction could be the result of contact with potential irritants such as soap, detergents, solvents, acids/alkalis, chemicals and soil, causing irritant contact eczema. Or there could be an allergic reaction to a substance that is not commonly regarded as an irritant, such as rubber or nickel, causing allergic contact eczema. It is possible to have been in contact with a substance for years without any problems and then suddenly develop sensitivity to it. If you identify a pattern, tell your healthcare professional as allergy patch testing may be appropriate.

Pompholyx may occur as a single episode; but for most it is a chronic type of eczema that will come and go.

Treatment

First, any obvious trigger for the pompholyx eruption should be avoided as far as possible, especially in the case of a contact allergy.

Emollients will be very soothing, but if your skin is weepy, oozing and crusty, a wet soak may be advised – usually a potassium permanganate soak under supervision (prescribed as Permitabs, which are dissolved in water to

the strength of the colour of rosé wine) once or twice a week. Soak the hands and/or feet in this solution for approximately 15 minutes (preferably in an old bucket or washing-up bowl) and then rinse in water with emollients and pat dry. This treatment does stain your skin and the bath (in fact, everything it comes into contact with!) – hence the suggestion of an old bucket or washing-up bowl – so use it carefully!

When the acute eruption of pompholyx subsides, the soaks should be stopped (usually after 3-7 days) and topical corticosteroids can be applied. These will need to be prescribed by your doctor or other healthcare professional. Topical corticosteroids switch off the inflammatory response but as they reduce the inflammatory process the skin can become drier, so you will need to apply leave-on emollients (medical moisturisers) frequently. As with other types of eczema, if you develop pompholyx eczema you need to avoid soap and detergents and use emollient soap substitutes, washes or gels instead.

If your hands and feet are extremely sore and weepy, and yellow crusting is present, you may have a bacterial infection. This will require a course of oral antibiotics, prescribed by your doctor or other healthcare professional.

Additional treatments for severe pompholyx

Alitretinoin (known as Toctino®), a retinoid drug derived from vitamin A, is used for adults with chronic hand eczema, that is, hand eczema (including pompholyx) that lasts a long time and is not helped with steroid creams or keeps coming back. Alitretinoin works by reducing the inflammation associated with eczema as well as damping down the response of the immune system. It is a capsule that is taken by mouth once a day with a meal for 12-24 weeks, depending on how the condition responds to the treatment.

Alitretinoin can only be prescribed by dermatologists or doctors with experience both in managing severe hand eczema and in the use of retinoids. The specialist will need to determine that your hand eczema is severe by examining your hands and asking a series of questions about how it affects your life. You will also need to be carefully monitored. It is known that retinoids are very likely to cause severe birth defects if taken during pregnancy. This means that any woman with child-bearing potential must avoid becoming pregnant during treatment and for one month after stopping treatment – for example, by using two effective methods of contraception. The most common side effect is headaches. Other side effects include flushing, dry skin and lips, lip inflammation, raised blood fats such as cholesterol and decreased levels of thyroid hormone. Due to potential side effects, a lower dose will be prescribed if you are diabetic.

Phototherapy (UVB or PUVA), using either UVB or UVA rays administered by a special foot/hand light box, may be recommended if this treatment option is available locally to you. Assessment and treatment (2-3 times a week) would usually take place in a dermatology department. In some areas of the UK you may be loaned a light box so you can administer your treatment at home, although you will continue to be monitored by the dermatology department. Prior to treatment, your feet or hands might be coated in a light-sensitising solution called psoralen (the P in PUVA). Phototherapy treatment usually continues for a few months until the pompholyx eczema has resolved.

Occasionally, for very severe outbreaks of pompholyx eczema, a short course of oral steroids tablets is prescribed.

Practical management

- Use lukewarm water for washing as very hot or cold water may irritate. Remember to use an emollient as a soap substitute, and avoid soap.
- Try to avoid direct contact with any detergents or cleansing agents, using cotton-lined gloves rather than rubber or plastic gloves alone. Be very careful about

detergents etc. when doing any jobs in the home. When shampooing your hair, always wear cotton-lined gloves as above. If possible, when the pompholyx is active, ask someone else to do the shampooing for you – and the housework, too!

- If itching is interfering with sleep, sedating antihistamines may be helpful at night (but will cause unwelcome drowsiness if taken during the day). Remember, though, antihistamines in eczema aid sleep rather than actively treat the itch.
- Large blisters may be gently drained by using a large sterile needle. Very gently make a small jagged tear in the blister (a pin-prick hole will not be effective as it will not release fluid and will seal up very quickly). Make sure that you do not remove the 'roof' of the blister – this protective layer of skin needs to stay in place, otherwise soreness can increase, healing can be delayed and there is a risk of infection.
- Tights, stockings, socks and gloves should be 100% cotton or silk if possible, as synthetic fabrics such as nylon are less absorbent than cotton and do not generally allow the skin to 'breathe' in the same way.
- Bandaging or wrapping the feet or hands can help to protect the skin. Alternatively, cotton or silk gloves or socks can be worn. Covering the skin can bring some relief as well as ensuring that creams and ointments are given the maximum opportunity for absorption. If paste bandages or wet wraps are used, you should discuss with a health care professional the suitability, application technique and how to use them with creams and ointments. Any weeping blisters, however, should be covered with a non-stick dressing, to prevent tearing the blister roof.
- If it is difficult to keep topical steroids on the hands and feet, another option is to use a steroid impregnated tape, which would need to be prescribed by your doctor.
- If you have painful cracks and fissures, post-blister stage, Extra Thin Duoderm is a helpful hydrocolloid dressing that you can cut to shape and put on cracks and fissures. However, you should talk to your doctor before using Duoderm on an area you are treating with topical steroids – this is because when you closely cover skin that is being treated by topical steroids with, for example, hydrocolloid (or plastic), this will have the effect of making the topical steroid more potent. So if you are being treated with topical steroids, you should first discuss this option with your GP and seek their guidance.
- Footwear should be kept dry and permeable to the air. Avoid plastic or rubber shoes, trainers and any other type of footwear likely to cause sweating – leather linings are preferable to synthetic.

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National Eczema Society is the UK charity for everyone affected by eczema. We help support people with eczema, providing information and advice, which we deliver through our website, social media, campaigns, publications and nurse-supported Helpline. We also provide a voice for people with eczema, raising awareness of the condition, supporting research into new treatments and campaigning for better medical care.

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