

# HAND DERMATITIS / HAND ECZEMA

#### What are the aims of this leaflet?

This leaflet has been written to help you understand more about the causes and treatment of hand dermatitis.

#### What is hand dermatitis?

Hand dermatitis is also called hand eczema. It is common and can affect about one in every 20 people. It can start in childhood as part of an in-built tendency to eczema, but is commonest in teenagers and adults. Hand dermatitis may be a short-lived, transient problem. However, in some people, it lasts for years and can have a great impact on daily life.

### Who is most likely to get hand dermatitis?

People who have had eczema in childhood (atopic eczema), as well as those who work in jobs with frequent water contact (wet work) have a high risk of getting hand dermatitis.

#### What causes hand dermatitis?

In many people, hand dermatitis happens because of direct damage to the skin by **harsh chemicals as well as irritants**, especially soap, detergent and repeated contact with water. This is called irritant contact dermatitis.

Skin contact with allergens such as perfumes, metals, rubber or leather can also cause dermatitis in people with an allergy to these substances. This is called allergic contact dermatitis.

In many cases, however, the cause of a patient's hand dermatitis is **unknown**, and there is no identifiable trigger. It is also common for someone

to have more than one cause of hand dermatitis, for example a combination of atopic dermatitis and irritant or allergic contact dermatitis.

## Is hand dermatitis hereditary?

No, it is not hereditary; however the tendency to get hand dermatitis can run in families along with atopic dermatitis, asthma and hay fever.

## What are the symptoms of hand dermatitis?

The affected areas of skin feel hot, painful, rough, scaly and itchy. There may be itchy little blisters or painful cracks. This may in turn, result in pain when moving the hand and fingers.

#### What does hand dermatitis look like?

In hand dermatitis, the skin is inflamed, red and swollen, with a damaged dried-out or scaly surface which makes it look flaky. There may be cracked areas that bleed and ooze. Sometimes small water blisters can be seen on the palms or sides of the fingers. Different parts of the hand can be affected such as the finger webs, fleshy fingertips or centre of the palms. There are several different patterns of hand dermatitis, but these do not usually tell us its cause and the pattern can change over time in one person.

Hand dermatitis may get infected with bacteria called Staphylococcus or Streptococcus. This causes more redness, soreness, crusting, oozing and spots or pimples.

### How is hand dermatitis diagnosed?

Diagnosing hand dermatitis is done by carefully examining the skin. Examining other body areas will confirm the eczema is isolated to the hands, or suggest a more widespread skin condition is involved.

Identifying a cause for your hand dermatitis involves looking at the pattern of your hand dermatitis and highlighting potential triggers.

Patch testing is used to find out if an allergy (e.g. to metal) is causing allergic contact dermatitis. This is usually done in a dermatology department. This may be one of several causes for a person's hand dermatitis. The tests are done over several days and on the final day should be read and explained by an expert. Most adults are tested for 50 or more common allergies. More

specific allergens may also be tested depending on the history of a patient's hand dermatitis.

## Can other skin complaints look like hand dermatitis?

Psoriasis of the hands can look similar to dermatitis, especially when there are thick, scaly patches on the palms. Ringworm or fungus infection also causes itchy scaly rashes. These conditions usually start on the feet or groin, but can spread to the hands and nails and sometimes affect only one hand. Skin samples from affected areas can be sent for fungal analysis (mycology) if this needs to be ruled out.

# Which occupations often cause hand dermatitis?

Occupations with a high chance of hand dermatitis include cleaners, carers, people who look after young children, chefs, hairdressers, mechanics, doctors, dentists, nurses, florists, machine operators, aromatherapists, beauticians, and construction workers. Any job which involves repeated contact with water or hand washing more than 10 times a day ('wet work') has an increased chance of causing hand dermatitis.

#### Can hand dermatitis be cured?

In most cases, treatment controls the condition but does not cure it. Early identification and treatment may avoid long standing issues related to hand dermatitis. In people with allergic contact dermatitis, avoiding the allergen(s) may help or even clear the hand dermatitis.

#### How can hand dermatitis be treated?

**Moisturisers (emollients)** are an essential part of treating hand dermatitis. They help repair the damaged outer skin and lock moisture inside the skin making it soft and supple again. They should be applied repeatedly throughout the day and whenever the skin feels dry. They also serve to reduce the risk of secondary bacterial infection.

**CAUTION**: This leaflet mentions 'emollients' (moisturisers). Emollients, creams, lotions and ointments contain oils which can catch fire. When emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that a naked flame or cigarette smoking could cause these to catch fire. To reduce the fire risk, patients using skincare or haircare products are advised to be very careful near naked flames to reduce the risk of clothing, hair or bedding catching fire. In particular smoking cigarettes

should be avoided and being near people who are smoking or using naked flames, especially in bed. Candles may also risk fire. It is advisable to wash clothing daily which is in contact with emollients and bed linen regularly.

**Using moisturisers as soap substitutes** is very important as they clean the skin without drying and damaging it like liquid soap and bar soap can.

**Steroid creams and ointments** are the commonest prescribed treatment for hand dermatitis. They relieve symptoms and calm inflamed skin. Stronger strength steroids are usually needed as mild steroids (1% hydrocortisone) do not work on thick skin. They are applied up to twice a day. If they are overused, there is a risk of skin thinning. However, when used as suggested by your doctor or nurse, topical steroids do not usually cause these problems.

Antihistamine tablets are not often helpful in hand dermatitis. Non-sedating antihistamines are not helpful for most people with eczema. Sedating antihistamines are sometimes taken for a few days when eczema flares up to help sleep. Sedating antihistamines cause drowsiness and should not be taken before driving and using machinery.

<u>Calcineurin inhibitors</u> are creams and ointments used to treat dermatitis instead of steroids. While they may work less well than strong steroids, they do not carry any risk of skin thinning. They can often cause burning or stinging after application.

**Ultraviolet (UV) Therapy** is a hospital-based treatment for very severe hand dermatitis. It involves visiting hospital for treatment two or three times a week for about six weeks.

**Steroid tablets** may be given for a few weeks for a severe flare of hand dermatitis. The dose is usually decreased gradually over a few weeks. Longer-term use is not advisable due to the side effects.

**Alitretinoin** is based on vitamin A and is prescribed by specialists for severe long-standing hand dermatitis. A treatment course usually lasts up to 6 months. It must never be taken during pregnancy. For more on the important side-effects associated with alitretinoin, please see the <u>BAD leaflet</u>.

**Systemic immunosuppressants** are powerful treatments sometimes prescribed by specialists to treat severe hand dermatitis. These medications used include <u>azathioprine</u>, <u>ciclosporin</u> and <u>methotrexate</u>. These treatments are usually reserved for more severe cases or when other treatment options have failed to control symptoms. They are not suitable for all people. People

taking these tablets need to be monitored carefully and have regular blood tests.

## Preventing hand dermatitis – what can I do?

Always use protective gloves at work and at home when in contact with irritating chemicals and water. Wear cotton gloves underneath or chose cotton-lined gloves if you have to work for longer periods of time.

The best choice of glove material (rubber, PVC, nitrile etc) will depend on which chemicals or allergens are being handled. Gloves should be clean and dry inside and not broken.

Some people have boxes of nitrile gloves in the kitchen and bathroom, to help remember to use these when preparing food, cleaning surfaces and washing hair.

If gloves cannot be worn, a barrier cream should be applied before exposure to irritants. After exposure, wash the hands carefully with a soap substitute, rinse, dry thoroughly then moisturise.

The BAD has a leaflet on How to care for your hands.

### Where can I get more information about hand dermatitis?

Health and Safety Executive website: <a href="https://www.hse.gov.uk/food/dermatitis.htm">www.hse.gov.uk/food/dermatitis.htm</a>

For details of source materials please contact the Clinical Standards Unit (<u>clinicalstandards@bad.org.uk</u>).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists; individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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