



## **CELLULITIS AND ERYSIPELAS**

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

This leaflet has been written to help you understand more about cellulitis and erysipelas. It tells you what these conditions are, what they are caused by, what can be done about them, and where you can find out more about them.

### **What are cellulitis and erysipelas?**

Erysipelas and cellulitis are common infections of the skin. Erysipelas is a superficial infection, affecting the upper layers of the skin, while cellulitis affects the deeper tissues. They can overlap, so it is not always possible to make a definite diagnosis between the two.

### **What causes cellulitis and erysipelas?**

Bacteria (germs) get through a break in the skin. This break can be very small, such as from a scratch, insect bite or injection, or from another skin disease such as athlete's foot, eczema or a leg ulcer. The body's immune system tries to stop the bacteria spreading. If this is not successful, an infection will develop.

Erysipelas is usually caused by bacteria called streptococci. Cellulitis is also often caused by streptococci, but many other bacteria may be involved, such as staphylococci.

### **Who gets cellulitis or erysipelas?**

Anybody can get cellulitis or erysipelas, and once you've had it, you are more likely to get it again in the same part of the body. There are also some conditions which make cellulitis and erysipelas more likely:

- Athlete's foot (fungal infection of the skin between the toe webs)
- Cuts in the skin, leg ulcers and pressure (bed) sores
- Insect bites
- Intravenous drug use
- Alcohol excess
- Swollen limbs due to the veins or lymphatic vessels not working well (eg. lymphedema)
- Liver disease
- Obesity
- Poorly controlled diabetes
- An impaired immune system, e.g. in infants, due to illness, older age or medication
- Eczema

### **Are cellulitis and erysipelas hereditary?**

No.

### **What are the symptoms of cellulitis and erysipelas?**

You may feel unwell and feverish with a high temperature and shivers. This may start a few hours or a day before the skin changes become visible. The affected skin will become sore, swollen, firm, warm, and red, and blisters may form. The nearest lymph glands may become swollen and tender. The area of affected skin may gradually get larger. These features can develop quite quickly, over hours to a few days.

### **What do cellulitis and erysipelas look like?**

Cellulitis is most common on the lower leg and erysipelas on the legs and face, but any area of skin can be affected.

An area of redness develops and enlarges, often slowly with an ill-defined edge in cellulitis, and more suddenly with a sharp edge in erysipelas. Swelling and blisters may then develop, which can be filled with clear fluid or blood. As the blister top comes off, a raw area of skin can be seen. In severe cases, areas of skin may turn purple or black. There may be red streaks in the skin above the affected area.

## **How will cellulitis and erysipelas be diagnosed?**

Cellulitis and erysipelas are diagnosed by the typical appearance and symptoms. A skin swab or blood tests may be taken to try to identify the bacteria in the laboratory; however, identification of the bacteria is rarely possible.

## **Are cellulitis and erysipelas serious?**

The severity can range from mild to severe. This will depend on how large the red area is, which part of the body is affected (erysipelas of the face is more serious) and if there are any other health problems such as an impaired immune system or poorly controlled diabetes. Cellulitis and erysipelas can also lead to complications:

- Septicaemia, also known as blood poisoning or sepsis (bacteria spreading through the blood, making the person very ill)
- Abscess (a collection of pus in the affected area)
- Infection spreading to deeper tissues, like the muscle or bone
- Long-term swelling of the affected site due to lymphatic vessel damage
- Increased likelihood of further cellulitis or erysipelas at the same site
- Kidney damage following streptococcal infection
- Meningitis following facial erysipelas

## **Are cellulitis and erysipelas contagious?**

No, because they affect the deeper layers of the skin. They are different from [impetigo](#), which is a superficial infection and is easily passed to other people.

## **Can cellulitis and erysipelas be cured?**

Yes, and treatment with antibiotics at an early stage is important to prevent the spread of infection and the complications listed above.

## **What tests are needed for cellulitis and erysipelas?**

Uncomplicated cellulitis in a healthy patient does not require a blood test. Some people will have a blood test and swab of the affected area of skin.

## **What is the treatment for cellulitis and erysipelas?**

An oral antibiotic (taken by mouth) must be given as early as possible and continued until the recommended course is completed. The antibiotic given to you will depend on your local trusts antimicrobial guidelines. If the condition is not improving, higher doses and longer courses may be required. More severe cellulitis and erysipelas are likely to need antibiotic injections or infusions in hospital.

Most people are treated with a form of penicillin, so it is extremely important that you tell your doctor if you are allergic to penicillin.

As long as the affected area is red, swollen and hot, it should be rested. In cellulitis or erysipelas of the leg, the foot should be rested higher than the hip to allow gravity to reduce the swelling.

Failure to improve to appropriate treatment may lead your doctor to seek a specialist opinion as sometimes this condition can mimic others.

It is important that any breaks in the skin, for example due to athlete's foot or eczema, are treated to prevent repeated episodes of cellulitis. Your doctor may prescribe topical medication (in a cream) for this. Any leg swelling after the skin infection has settled should be treated with compression stockings until the swelling has gone completely.

If there are repeated episodes of cellulitis or erysipelas, the doctor may suggest long-term preventative antibiotic treatment.

### **Self Care (What can I do?)**

- See your doctor as early as possible if you think you are getting another attack of erysipelas or cellulitis. If the attacks become frequent, your doctor may give you a prescription for an antibiotic to keep at home and take as soon as you notice any symptoms of infection.
- You should follow advice about skin care to reduce breaks in the skin.
- Support stocking, leg elevation and weight loss can help any remaining swelling of your legs.
- Avoid smoking and stay clear from smokers when using paraffin-based products, as these are highly flammable.

**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.

### **Where can I get more information about cellulitis and erysipelas?**

<http://www.nhs.uk/conditions/Cellulitis/Pages/Introduction.aspx>

<http://www.patient.co.uk/health/Cellulitis.htm>

<http://www.dermnetnz.org/doctors/bacterial-infections/cellulitis.html> (includes photographs)

<http://www.dermnetnz.org/bacterial/erysipelas.html> (includes photographs)

For details of source materials used please contact the Clinical Standards Unit ([clinicalstandards@bad.org.uk](mailto:clinicalstandards@bad.org.uk)).

**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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