

Medicine for Managers

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Cellulitis

Cellulitis is a bacterial infection of the skin and also of the deeper tissues beneath the skin. It can be effectively treated with antibiotics but it can become serious if treatment is delayed. It commonly affects the lower part of the body, including the legs, feet and toes, but it can occur anywhere and may also develop on the fingers, hands, arms or face. The disease causes painful, hot and swollen skin in the affected area.

Cellulitis is common and the offending bacteria often gain access to the deeper layers of skin through a breach in the outer covering of skin.

Anyone can develop cellulitis but there is increased risk in:

- Children
- Sites where the skin has been lacerated, ulcerated, bitten by an animal or insect, tattooed, pierced or the site of surgical intervention
- Areas of patients affected with psoriasis, eczema or even athlete's foot
- Obesity and poor circulation
- IV drug usage
- Reduced immunity to infection

Symptoms of Cellulitis

Generally, cellulitis causes the development of swelling of the affected area. It becomes hot, swollen and painful.

The skin becomes red or purplish and the appearance may be generalised or patchy



an orange skin.

appearing like a rash.

The skin may be lumpy and becomes stretched by the swelling producing an appearance rather like

Fever and other general symptoms of infection,

such as aching and fatigue may be present.



If the hands or feet are affected, the fingers may be difficult to use or it may



be difficult to walk.

Cellulitis affecting the face may be serious especially if the

eye(s) are involved.

The risk is of spread to the deeper parts of the face causing more serious illness.

The Cause of Cellulitis

A wide range of bacteria can cause cellulitis. Most commonly it is the result of infection with ***Streptococcus pyogenes*** or ***Staphylococcus aureus***.

More recently the number of cases caused by ***MRSA (Methicillin Resistant Staphylococcus Aureus)*** has shown a worrying increase.

Progress of Cellulitis

Cellulitis starts at the site of a defect in the skin. Initially the skin appears discoloured and may start to feel warm to the touch in the affected area. As infection spreads, the discolouration becomes darker, the area swells and becomes more tender.

Diagnosis of Cellulitis

Normally the diagnosis is clear from the presenting features. However, if the infection is spreading or there is a risk of systemic sepsis, tests may include:

- Blood tests, including blood cultures
- Skin tests to identify the offending organism

Management and Treatment of Cellulitis

For mild cases, the GP will usually prescribe antibiotic tablets, commonly penicillin or a cephalosporin.

Although the symptoms may initially worsen, the antibiotic should have an effect by the third day. Full recovery usually occurs within seven to ten days.

Severe cases of cellulitis may not respond to oral antibiotics and require a hospital admission for treatment with intravenous antibiotics.

Other treatments that may assist with the healing process include:

- A warm compress
- Elevation of the affected area
- Movement of any joint near the affected area to minimise stiffness

Pain may normally be treated with paracetamol or simple non-steroidal anti-inflammatory drugs.

Recurrence of Cellulitis

A significant proportion of sufferers experience recurrences of the infection. The risk may be reduced by:

- Keeping the skin clean and moisturised
- Treating any wounds, cuts or lacerations with an antiseptic cream
- Covering any wounds or sores with a bandage and protect with suitable clothing to prevent entry of dirt or bacteria into a wound
- Avoid touching or rubbing the affected area

- Obtain medical attention if any features of cellulitis start to appear, such as swelling, discolouration or pain

The Incidence of Cellulitis

It is estimated that there are over 100,000 admissions a year of patients with cellulitis and over half of them are associated with infection in the lower limb.

Estimates of the incidence of the infection vary wildly but an average figure might be about 16-18 people per 1,000 per year.

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