STAPHYLOCOCCAL SCALDED SKIN SYNDROME

What are the aims of this leaflet?

This leaflet has been written to help you understand more about staphylococcal scalded skin syndrome. It tells you what it is, what causes it, what treatment is available, and where you can find out more about it.

What is the staphylococcal scalded skin syndrome?

Staphylococcal scalded skin syndrome is a widespread painful rash caused by a bacteria called *Staphylococcus aureus,* which produces a toxin that damages the outer layer of the skin causing it to be shed.

When *Staphylococcus aureus* infects the skin, it can cause small blisters to appear at the site of infection. These easily burst. This condition is known as the bullous (blistering) type of impetigo. The skin then resembles a scald or burn, which is why the condition is called the staphylococcal scalded skin syndrome. It is the bacterial toxin that causes the outer layer of skin to become detached and then peel and crust.

The immune system and the kidneys normally protect the body from bacterial toxins, but if either of these is not working properly, the bacterial toxin can enter the blood stream and circulate around the body affecting most of the body's surface.

What causes the staphylococcal scalded skin syndrome?

Staphyloccoccus aureus is the most common bacteria to infect the skin, eyes and nose. For example, it is the usual cause of:

- impetigo
- boils and abscesses
- styes and conjunctivitis

- infections in grazes and wounds
- infections in skin conditions such as eczema

Up to 40% of adults are carriers of *Staphylococcus aureus* without being infected (colonized) or ill themselves. Outbreaks of staphylococcal scalded skin syndrome can occur in neonatal units and in childcare facilities.

In young children, especially newborns, the immune system and kidneys are not fully developed, and are therefore more commonly affected. Staphylococcal scalded skin syndrome is rare in adults, but can affect those who have kidney failure and immune deficiency, those on immune suppressant drugs or undergoing chemotherapy.

As staphylococcus bacteria can be carried by adults in their nose, throat or mouth without being infected or unwell it is easily passed from person to person from their hands, towels, and droplets from either coughing or sneezing.

What are the features of the staphylococcal scalded skin syndrome?

The original infection may be relatively minor, for example an infected graze, nappy rash or a red sticky eye. After a few days a widespread patchy red rash appears with little blisters and then the patches rapidly join up to cover most of the skin surface. Unlike most rashes it is painful and affected children are miserable, feverish and may not want to be held or touched. Soon the skin begins to peel leaving painful raw patches.

If large areas of skin are shed, body fluid and salts can be lost causing dehydration, and further infection may get through into the bloodstream.

How will it be diagnosed?

The diagnosis is often made from the typical appearance of the skin. Surface fluid or pus may be tested (via a skin swab) to confirm the presence of the bacteria and in some cases blood will also be taken and tested for an infection. It is sometimes necessary for a small piece of skin to be sent for microscopic examination.

Can it be cured?

In most cases staphylococcal scalded skin syndrome is cured completely, especially when treatment starts early. Once cured there is no visible difference or lasting effects to the skin.

How can it be treated?

Usually antibiotics will need to be given intravenously, through a drip or cannula (small tube) inserted into a vein for a day or two. Once recovery has started treatment is then changed to an oral antibiotic usually for another 5 or 8 days. If the infection is caught early, it can sometimes be treated with oral antibiotics straightaway and intravenous antibiotics can be avoided. At the same time as having antibiotics, the skin needs to be gently cleansed at least once per day with a soap substitute, which may contain an antiseptic. Greasy moisturisers are recommended in order to soothe the skin and to stop the healing skin from sticking to clothing or bedding. In some cases it may be necessary to treat the area with burns dressings. Pain killers are also useful and can be used regularly until the skin has fully healed.

Where can I find out more about the staphylococcal scalded skin syndrome?

Web links to detailed leaflets:

www.emedicine.com/DERM/topic402.htm
http://dermnetnz.org/bacterial/scalded-skin-syndrome.html

For details of source materials used please contact the Clinical Standards Unit (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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