



## 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 painful, blistering skin condition which may cover a wide area of skin, caused by a bacteria called *Staphylococcus aureus*. This produces a toxin that damages the outer layer of the skin causing it to blister and peel. The affected skin initially looks red, resembling a scald or burn and is very tender to touch, which is why the condition is called the staphylococcal scalded skin syndrome.

### What causes the staphylococcal scalded skin syndrome?

*Staphylococcus 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

Only 5% of *Staphylococcus aureus* produces proteins that are toxic to the skin. It is that bacterial toxin that causes the skin to detach and then peel and form a crust.

The condition is more common in neonates and children younger than 5 years. This is because they may not have the protective antibodies against

these toxins as their immune system has not yet developed a natural protection against bacteria which older children and adults have. Staphylococcal scalded skin syndrome is very rare in adults, but can affect those who have chronic kidney disease and immunodeficiency, those on immunosuppressant drugs or undergoing chemotherapy. As staphylococcus bacteria is carried naturally in the nose (up to 80%), throat or mouth without causing illness, it is easily passed from person to person on their hands, towels, and droplets from either coughing or sneezing.

### **What are the features of the staphylococcal scalded skin syndrome?**

The original source of 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. Often pain is the first symptom and there is little to be seen on the skin. Affected children may be miserable, lethargic (lacking energy) feverish and not want to be held or touched. Gentle pressure on the skin can cause it to peel leaving painful raw patches. If large areas of skin peel, body fluids and salts can be lost causing dehydration, and further infection may enter into the bloodstream. It does not affect the mouth or the eyes.

### **How will it be diagnosed?**

The diagnosis is often made from the typical appearance of the skin and the symptoms. Skin swabs may be taken from the source of infection and blister fluid to confirm the presence of the Staphylococcal bacteria and in some cases blood tests 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 to exclude other causes for the blisters.

### **Can it be cured?**

Yes. The earlier treatment is started the higher the chance of a cure reducing the risk of widespread infection. Once cured there is no visible difference (scarring) 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 to

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 taking antibiotics, the skin needs to be gently cleansed at least once a day with a soap substitute, which may contain an antiseptic. Greasy moisturisers are recommended in order to soothe the skin, aid healing 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 relief is important such as paracetamol, ibuprofen and oral morphine to keep pain under control while the skin heals.

**CAUTION:** This leaflet mentions ‘emollients’ (moisturisers). Emollients, creams, lotions and ointments contain oils which can make it easier for dressings, clothing, bed linen or hair to catch fire. To reduce the fire risk, patients using these moisturising 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. Daily washing is advisable for clothing which is in regular contact with emollients and bed linen.

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

*Web links to detailed leaflets:*

[www.pcds.org.uk/clinical-guidance/staphylococcal-scalded-skin-syndrome](http://www.pcds.org.uk/clinical-guidance/staphylococcal-scalded-skin-syndrome)

[www.nottinghameczema.org.uk/documents/staphylococcal-scalded-skin-syndrome.pdf](http://www.nottinghameczema.org.uk/documents/staphylococcal-scalded-skin-syndrome.pdf)

<http://dermnetnz.org/bacterial/scalded-skin-syndrome.html>

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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