



A patient information flyer developed by the Asian Society of Pediatric Dermatology on

# Common Bacterial Skin Infections

## ■ What is Impetigo?

Impetigo is a bacterial infection of the skin. The most common bacteria causing impetigo is *Staphylococcus aureus*, or "Staph aureus". Impetigo is very common in young children but can also affect people of other ages, especially those with skin that is damaged by cuts, insect bites, eczema, or those with low immunity such as diabetes. The bacteria is often spread from person to person by skin-to-skin contact or by touching contaminated surfaces such as towels and clothes.

- Impetigo is a superficial bacterial infection of the skin.
- The most common bacteria causing impetigo is *Staphylococcus aureus*, or "Staph aureus". Less commonly, it can be caused by another bacteria, *Streptococcus*.
- Impetigo is common in young children but can also affect people of other ages, especially those with skin that is damaged by cuts, insect bites, or eczema.
- The bacteria can spread from by skin-to-skin contact or by touching contaminated surfaces such as towels and clothes.

## ■ How Does Impetigo Present?

Impetigo causes the affected skin to be red, itchy and sometimes painful. Children are usually otherwise generally well and most do not have a fever. Impetigo can occur anywhere on the skin but most commonly affects the face, especially around the nose and mouth, as well as on the hands. It begins as small pus-filled blisters that break easily to become golden yellow crusts and slowly becomes bigger patches with surrounding scales. When treated appropriately, impetigo heals over a few days or weeks without leaving scars, although there may be temporary redness and darker pigmentation

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- Children are usually otherwise generally well, and most do not have a fever.
- Impetigo can occur anywhere on the skin but most commonly affects the face, especially around the nose and mouth, and on the limbs.
- It begins as small pus-filled blisters that break easily to become patches with golden yellow crusts and surrounding scales.
- When treated appropriately, impetigo heals over a few days without leaving scars, although there may be temporary redness and darker pigmentation that may take weeks or months to resolve.

## ■ How is Impetigo Diagnosed?

Should impetigo be suspected, the child should consult a doctor for accurate diagnosis and early treatment. The doctor can diagnose impetigo by performing a skin examination. A skin swab from the affected area may be performed to grow the bacteria if indicated. In cases of recurrent impetigo, a swab from your child's nose to test for the presence of "Staph aureus" may be indicated, and if positive, will benefit from additional treatment.

- Impetigo is diagnosed by the typical appearance and symptoms.
- A skin swab from the affected area may be performed to grow the bacteria.
- If recurrent, a swab from your child's nose to test for the presence of "Staph aureus" may be indicated.

## ■ What is the treatment for Impetigo?

Treatment depends on the severity and extent of the skin infection and they include:

- Antibacterial body wash or soap
- Soaks with potassium permanganate (PP) or normal saline
- An antibiotic cream two to three times a day for 7-10 days or until the lesions clear up
- A course of oral antibiotics for 7-10 days

**For recurrent infections, and if bacteria is found in the nose test, the doctor may prescribe application of topical antibiotics to be applied into the nose and anti-bacterial wash as a soap. It is important to follow the instructions given by the doctor.**

## ■ How to reduce spread of Impetigo?

The following measures will be helpful to reduce the spread of impetigo to other contacts:

- Keep fingernails clean and short to avoid scratching and breaking affected skin
- Avoid touching patches of impetigo, and stop other people touching them too.
- Wash your hands after touching the affected skin.
- Wash your hands before and after applying the antibiotic cream or ointment on the impetigo.
- Not to share towels or personal items until the infection is completely treated
- The child should not go back to school or childcare facilities until the lesions are dried and healed.

# ERYSIPELAS / CELLULITIS

## ■ What is Erysipelas / Cellulitis?

- Erysipelas and cellulitis are bacterial infections affecting deeper layers of skin.
- The most common bacteria causing erysipelas or cellulitis is Streptococcus, but other bacteria may be involved, including Staphylococcus aureus.
- Compared to impetigo, erysipelas and cellulitis are not as contagious.
- Erysipelas or cellulitis usually occurs through breaks in the skin e.g. cuts, insect bites or eczema.

## ■ How does Erysipelas / Cellulitis Present?

- Erysipelas or cellulitis presents with pain, swelling, warmth, redness and sometimes blistering over the affected skin, usually over the arms or legs.
- There may be fever, shivers, and general discomfort.
- The lymph glands nearest the infection may be swollen and painful.

## ■ How is Erysipelas / Cellulitis Diagnosed?

- Cellulitis and erysipelas are diagnosed by the typical appearance and symptoms.
- A skin swab may be done to identify the bacteria if there is broken skin.
- Blood tests may be required to monitor for complications e.g. blood infection.

## ■ How is Erysipelas / Cellulitis Treated?

Treatment depends upon the severity of the infection.

For milder infections, a course of oral antibiotics for 1 to 2 weeks may be prescribed. It is important that the course of antibiotics is completed.

If the infection is not improving with oral medications, or if the infection is more severe, hospital admission for antibiotic injections may be required for a few days. These injections are given directly into the vein (intravenous or IV) through a plastic tube (cannula).

Other treatment measures that may be required include:

- Rest and elevate the affected area.
- Soaks with potassium permanganate (PP) or normal saline
- Pain-relief medications e.g. paracetamol

## BOILS (ABSCESS)

### ■ What is a Boil / Abscess?

- A boil or abscess is a bacterial infection of the deeper part of the hair follicle within the skin.
- It is most often caused by Staphylococcus aureus.
- Boils more commonly affect older children or teenagers.

### ■ How do Boils / Abscesses Present?

- Boils begin as a small, itchy, and sometimes painful bump that develops into a bigger red lump under the skin surface.
- Occasionally, pus may be released from the boil.
- Fever and body-aches may be present.
- Boils can occur anywhere on the body but is more common over sites with more hair.

### ■ How are Boils / Abscesses Diagnosed?

- Boils / abscesses are diagnosed by the typical appearance and symptoms.
- A skin swab may be done to identify the bacteria if pus is present.
- Blood tests may be required to monitor for complications e.g. blood infection

### ■ How are Boils / Abscesses Treated?

- Treatment depends upon the severity of the infection.
- For milder infections, a course of oral antibiotics for 1 to 2 weeks may be prescribed. It is important that the course of antibiotics is completed.
- If the infection is not improving with oral medications, or if pus is expressed from the boil, a minor operation to “open up” the boil may be performed by the doctor (incision and drainage).
- After the minor operation, the wound is left open and daily dressing is required until the wound heals up in 1 to 2 weeks.
- For more severe cases, hospital admission for antibiotic injections may be required for a few days. These injections are given directly into the vein (intravenous or IV) through a plastic tube (cannula).

