# Skin Infection (Cellulitis)

Cellulitis is a bacterial infection of the deeper layers of the skin and the tissues underneath. These infections require medical care, including antibiotics. Although most skin infections are mild, they can become serious, especially without proper treatment.

### What is cellulitis?

Cellulitis is not a specific disease; it refers to infection of the deeper layers of skin and connective tissue underneath the skin surface (subcutaneous tissues). Cellulitis can range from mild to severe, depending on what type of bacteria is causing the infection, where the infection is located, and your child's health and age. Nearly any kind of cut or injury to the skin can lead to cellulitis if it is not cleaned and properly taken care of.

These types of infections need medical treatment, which will probably include antibiotics to eliminate the infection beneath the skin.

#### What does it look like?

The main symptom of cellulitis is an area of swelling, warmth, redness, and tenderness somewhere on your child's skin.

- It often occurs in the area of a recent injury, for example, a cut or bite wound.
- The area of redness usually appears and begins to spread quite suddenly. Swelling can make the area look tense and tight.
- Your child may have other symptoms of infection, including:
  - Fever and chills.
  - Swollen lymph glands.
  - Fatigue, muscle aches, and just "feeling sick."
- Cellulitis can spread rapidly, causing potentially serious complications.



Call our office immediately if the area of skin swelling or redness is growing larger or extending outward.

### What causes cellulitis?

 Many different types of bacteria can cause cellulitis, most commonly "strep" (Streptoccocus) and "staph" (Staphyloccoccus) bacteria. If your child has diabetes or any condition that interferes with normal functioning of the immune system, a number of other types of bacteria may cause infection. • The bacteria may get under your child's skin after a relatively minor injury, such as a cut, bite, or scrape.

## What are some possible complications of cellulitis?

Complications that may occur if the infection spreads include:

- Abscess.
- Infection of the bloodstream (bacteremia), which can then spread the bacteria and infection to other organs or parts of the body.
- Infection of bone (osteomyelitis).
- Infection of the nearby lymph nodes.
- An immune reaction affecting the kidneys (glomerulonephritis) can occur a week or longer after the infection if the cause was strep.

### What puts your child at risk of cellulitis?

- Any type of skin wound, even a minor one, that allows bacteria to enter.
- Certain diseases such as diabetes, eczema, or any condition that interferes with normal functioning of the skin or the immune system.

### Can cellulitis be prevented?

The best prevention is to take good care of minor skin injuries. Wash the area well and remove all dirt. Keep wounds covered as long as the skin is broken, and watch to make sure they heal without turning red or swelling.

#### How is cellulitis treated?

- Antibiotics are the main treatment for cellulitis. Many different factors affect treatment, including where cellulitis is located, how severe it is, and your child's age and general health. Cellulitis on the face can spread quickly, especially in small children.
- If pus is present, the doctor may take a sample to try to identify the bacteria causing the infection. He or she may also take blood for culture and other tests to help identify the bacteria or to see if the infection is in the bloodstream. If necessary, the antibiotic may be changed after test results are available.
- Other tests, such as a white blood cell count, may be done to see how your child's body is responding to the infection.
- Infants, especially newborns, may be admitted to the hospital for tests and treatment. This decision depends on the location of the infection, how much of the body is

involved, and how sick your baby appears. Treatment will likely include intravenous (IV) antibiotic treatment. The main concern is that the infection may spread to the blood-stream, which can occur quickly in a young infant.

- If there is no fever or other sign that the infection is spreading, hospital treatment will probably be unnecessary.
- If your child does not have to go to the hospital, he or she will receive a prescription for oral antibiotics. It is very important that your child take the full prescription, even if he or she seems to be getting better. This is necessary to destroy all the bacteria and make sure the infection does not return.
- Your child's infection should start to get better within 1 or 2 days after starting antibiotic treatment. If the infection doesn't improve or if it seems to get worse, call our office immediately. This may be a sign that your child needs additional treatment or a different antibiotic.

 Medications such as acetaminophen and ibuprofen may help to reduce your child's pain and fever.

### When should I call your office?

During treatment for cellulitis, keep a close eye on your child's condition. The skin infection should start to look better (smaller, less red) within a day or two after starting antibiotic treatment. If the infection doesn't seem better during this time, or if it starts to look worse, call our office. Call our office if any of the following symptoms occurs:

- Return of fever, child feeling sicker.
- Spread of the infection, for example, if the area of redness grows larger or starts to extend in one direction.
  Be especially watchful of areas of cellulitis on the face in small children.

