

Impetigo

Impetigo is a purulent infection of the outer layer of the skin. It is caused by staphylococci (*Staphylococcus aureus*) and/or streptococci (group A beta-haemolytic streptococcus, *Streptococcus pyogenes*). Impetigo is recognized by the appearance of blisters and scabs on the skin, which can spread to various parts of the body and to people with whom the affected person has close contact.

Cause

In addition to impetigo, staphylococci and streptococci cause infections of various tissues and organs. The bacterium *Staphylococcus aureus* causes infections of the skin and subcutaneous tissue (inflammation around hair follicles, skin abscesses—carbuncles and furuncles, wound infections, etc.), and in more serious cases, infections of internal organs (e.g., inflammation of the heart valves) and sepsis. The bacterium *Streptococcus pyogenes* causes strep throat, scarlet fever, erysipelas, and, very rarely, more severe systemic infections. The bacteria first colonize the skin and then enter through tiny cracks or abrasions on the skin's surface. At the site of entry, a localized purulent skin infection develops, which is characteristic of impetigo.

Manifestation of the disease

The disease is more common in hot and humid areas. Lesions develop at sites of pre-existing skin damage (e.g., insect bites, scratches, minor wounds, abrasions, etc.).

Prevalence of the disease

Impetigo is primarily a childhood disease and is the most common skin infection among preschool children. It rarely occurs in children younger than two years of age.

Transmission

Infection usually occurs through direct contact with a patient or indirectly through transmission via contaminated objects to damaged skin.

Incubation period

Incubation period (i.e., the time from infection to the onset of symptoms) lasts 7–10 days.

Infectiousness

Infectiousness decreases approximately 24 hours after the start of systemic antibiotic treatment. If impetigo is not treated with antibiotics, the infectious period can last 10–21 days. The presence of untreated, purulent lesions can even prolong the infectious period to weeks or months.

Clinical picture

Bacteria colonize healthy skin as early as 1–2 weeks before skin lesions appear. Papules (small, round bumps raised above the skin's surface) first appear on the skin, which then develop into blisters that are partially filled with pus. Later, thick, copper-coloured crusts form, which can remain for several weeks. The lesions spread from one area of the skin to another and rarely itch or hurt. Most patients have swollen lymph nodes located closest to the skin lesions. Most patients with impetigo do not have a fever, headache, or general malaise.

Complications

Complications are rare, yet possible. A rare complication is inflammation of the renal glomeruli (acute post-streptococcal glomerulonephritis), which occurs 18–21 days after infection and typically affects children aged 3–7 years. As a rule, this inflammation resolves without any lasting effects.

Diagnosis

The diagnosis is based on characteristic skin lesions. Microbiological tests are usually not necessary; in exceptional cases, a swab is taken from the skin lesions to attempt bacterial isolation.

Treatment

Uncomplicated impetigo is treated by cleaning the skin lesions and removing scabs using saline compresses. In cases of uncomplicated impetigo, an antibiotic ointment (mupirocin) may also be used. The antibiotic ointment is applied to the affected areas of the skin 3 times a day for 7 days. Patient with widespread impetigo or complications require treatment with oral antibiotics. Antibiotic treatment is important to prevent potential future complications (glomerulonephritis) and to prevent the spread of the infection within small communities (day-care centres, schools, families).

Prevention

Preventing the spread of the bacteria that cause impetigo relies on careful personal hygiene. Children with untreated impetigo should not attend day-care or school. They may return to group settings once the skin lesions have dried up. A child with impetigo may return to school or day-care 48 hours after starting systemic antibiotic treatment, as they are no longer contagious, even if the skin lesions have not yet dried up. We recommend that the skin lesions be covered.