CONDITION

Ecthyma

Ecthyma is a bacterial skin infection that forms thick crusts over open sores.

WHAT IT IS
Deep bacterial skin infection causing crusted ulcers

BODY SYSTEM
Skin

MAIN SYMPTOMS
Thick crusts, painful ulcers, redness, pus

WHAT CAUSES IT
Bacterial infection, usually streptococci or staphylococci

HOW IT IS DIAGNOSED
Skin examination, sometimes bacterial swab and culture

MAIN TREATMENT
Wound care and antibiotics

CAN IT BE CURED?
Yes, antibiotics usually clear the infection

IS IT AN EMERGENCY?
Sometimes, with rapid spread, severe pain, or systemic illness

LONG-TERM OUTLOOK
Usually heals, but scarring is common

Overview

Ecthyma is a bacterial skin infection that causes sores beneath a thick crust. It is often described as a deeper form of impetigo, a common infection of the skin's surface.

Unlike ordinary impetigo, ecthyma extends into the dermis, the deeper layer of skin. This creates an open sore, or ulcer, beneath the crust. Because the damage reaches deeper into the skin, healing may take several weeks and can leave a scar.

Ecthyma most often affects the lower legs, ankles, thighs, or buttocks. It may develop where skin has been scratched, bitten, injured, or affected by another skin condition.

The infection is treatable. However, it usually needs medical assessment because antibiotics like amoxicillin or doxycycline are often required. Prompt care can limit the spread of infection and reduce further skin damage.

Symptoms

Ecthyma may begin as a small red spot, blister, or pus-filled bump. A thick, firmly attached crust then forms. The crust may look yellow, brown, grey, or dark.

Removing or lifting the crust reveals an ulcer underneath. This may have sharply defined edges and contain pus. The surrounding skin may be red, swollen, itchy, tender, or painful.

Common features include:

The sores often appear on the legs or other areas exposed to scratches and insect bites. Nearby lymph nodes may become swollen if the immune system is responding to the infection.

Ecthyma usually develops more slowly than a minor cut or graze. Without treatment, a sore may enlarge or additional sores may appear.

- One or more thick, crusted sores
- A punched-out ulcer beneath each crust
- Redness and swelling around the sore
- Pus, fluid, tenderness, or itching

Causes and risk factors

Ecthyma is caused by bacteria. The main causes are Streptococcus pyogenes , also called group A streptococcus, and Staphylococcus aureus . Both bacteria can live on the skin or in the nose without causing symptoms. They can cause infection when they enter damaged skin.

The bacteria may spread through direct contact with an infected sore or through contaminated items such as towels, clothing, or bedding. Touching a sore and then another area of skin can also spread the infection.

Skin damage that gives bacteria an entry point may come from:

Ecthyma can affect anyone. It is more likely when skin is difficult to keep clean and dry, or when people live in crowded conditions. Warm, humid weather may also help bacteria spread.

Diabetes, poor circulation, malnutrition, and conditions or medicines that weaken the immune system can increase the risk. They may also slow healing. Having one of these risk factors does not mean that a skin sore is ecthyma.

- Scratches, cuts, or grazes
- Insect bites

- Eczema or other itchy skin conditions
- Scabies
- Repeated rubbing or picking

Diagnosis

A healthcare professional can often recognise ecthyma by examining the crust and the ulcer underneath it. They will usually ask how the sore began, how quickly it has changed, and whether you have fever or other symptoms.

A swab may be taken from pus or from the base of the sore. The laboratory can grow and identify the bacteria in a process called a culture. It can also test which antibiotics are likely to work.

Culture is especially useful if the infection is widespread, keeps returning, or does not improve with initial treatment. It may also be used when antibiotic-resistant bacteria, such as methicillin-resistant Staphylococcus aureus (MRSA), are a concern.

Blood tests are not usually needed for a small, uncomplicated infection. They may be considered if you are generally unwell or if a deeper or spreading infection is suspected. A skin biopsy, which removes a small sample for examination, is rarely needed unless the diagnosis remains uncertain.

Ecthyma is not the same as ecthyma gangrenosum. Ecthyma gangrenosum is an uncommon but serious skin finding usually associated with infection in people whose immune systems are severely weakened.

Treatment and management

Treatment aims to clear the bacteria, help the ulcer heal, and prevent the infection from spreading.

Because ecthyma reaches deeper skin layers, oral antibiotics are commonly used. The choice depends on the likely bacteria, local patterns of antibiotic resistance, allergy history, and culture results when available. Very limited infection may sometimes be managed differently after medical assessment.

Take any prescribed antibiotic exactly as directed and complete the course unless the prescriber tells you to stop or change it. Contact the prescriber if side effects occur or if the infection worsens.

Crusts may need to be softened with a wet compress or gentle soaking so the area can be cleaned. Do not forcefully pull off a firmly attached crust or cut away tissue yourself. This can cause bleeding, increase skin damage, and spread bacteria.

General wound care may include:

Do not share towels, razors, clothing, or bedding while sores are active. Wash items that touch the infected area.

Pain relief may be useful while the ulcer heals. A healthcare professional or pharmacist can help you choose an appropriate option based on your health and other medicines.

Any condition that contributed to the infection may also need attention. This could include eczema, scabies, diabetes, swelling in the legs, or poor circulation.

The redness, pain, and drainage should begin to improve after effective treatment starts. The ulcer itself may take longer to close. Arrange follow-up if it is not improving, continues to enlarge, or new sores develop.

- Washing your hands before and after touching the area
- Cleaning the sore gently as instructed
- Covering it with a clean, non-stick dressing
- Changing wet or dirty dressings
- Avoiding scratching, squeezing, or picking

Complications

Scarring is the most common lasting effect because ecthyma damages the deeper skin. The healed area may also remain darker or lighter than the surrounding skin. Colour changes can fade slowly, but some persist.

The infection can spread into nearby skin, causing cellulitis. Cellulitis usually produces increasing warmth, redness, swelling, and tenderness. An abscess, which is a pocket of pus, may also develop.

Less commonly, bacteria can spread through lymph vessels or enter the bloodstream. This is more likely when an infection is extensive or when the immune system is weakened.

Some streptococcal skin infections are followed by inflammation of the kidneys, called post-streptococcal glomerulonephritis. Possible signs include dark or tea-coloured urine, reduced urination, and puffiness around the eyes or legs. This complication is uncommon but needs prompt assessment.

Prevention

Ecthyma cannot always be prevented, but protecting damaged skin and limiting bacterial spread can reduce the risk.

Clean cuts, grazes, and insect bites with soap and water. Keep them covered while they are open, especially if clothing or dirt may rub against them. Try not to scratch bites or itchy rashes.

Treating eczema, scabies, and other conditions that break the skin can remove entry points for bacteria. If you have diabetes or circulation problems, regular skin and foot checks may help you notice wounds early.

If someone in your household has ecthyma:

Repeated infections sometimes lead to testing for bacterial carriage on the skin or in the nose. Measures intended to remove these bacteria are not routinely needed and should only be used when recommended by a healthcare professional.

- Avoid direct contact with the sores and used dressings
- Do not share towels, clothing, razors, or bedding
- Wash hands regularly with soap and water
- Clean frequently touched surfaces
- Keep sores covered as advised

Living with it and what to expect

With appropriate treatment, most cases clear without long-term health problems. Pain, drainage, and surrounding redness often improve before the ulcer fully heals.

Healing may take several weeks because the body must repair deeper skin. Larger sores, delayed treatment, diabetes, poor circulation, or a weakened immune system can lengthen recovery. Dressings may be needed until the ulcer closes and no longer drains.

A scar is common. It may initially look red, purple, brown, or lighter than your usual skin tone. Its colour and thickness can change over the following months. Some scars remain visible.

You can usually continue many normal activities if the sore is securely covered and you feel well. Avoid activities that expose the wound to dirt, shared water, or close skin contact until you have received advice about when it is safe to return.

Ecthyma can return if bacteria enter another break in the skin or if an underlying skin condition

remains active. Recurrence does not necessarily mean that treatment failed. It may mean that another risk factor needs to be addressed.

When to get medical help

Arrange a medical appointment promptly if you have a thickly crusted sore with an ulcer underneath, especially if it is enlarging, draining pus, or not healing. Ecthyma often needs antibiotics and can resemble other skin conditions.

Seek same-day medical advice if:

Seek emergency care for confusion, fainting, trouble breathing, severe weakness, rapidly spreading purple or black skin changes, or severe pain that seems out of proportion to the visible sore. These symptoms can point to a serious spreading infection rather than routine ecthyma.

Dark crust alone can occur with ecthyma. The concern is a rapid change accompanied by severe pain, spreading skin damage, or significant illness.

- Redness, warmth, swelling, or pain is spreading
- New sores are appearing quickly
- You develop fever, chills, or feel generally unwell
- Red streaks extend from the infected area
- The sore is near an eye or on the face
- You have diabetes, poor circulation, or a weakened immune system
- Treatment has started but symptoms continue to worsen

Common questions

Is ecthyma the same as impetigo?

Ecthyma is generally considered a deeper form of impetigo. Ordinary impetigo affects the surface of the skin and usually does not scar. Ecthyma extends into the dermis, forms an ulcer, and is more likely to leave a scar.

Is ecthyma contagious?

Yes. The bacteria can spread through contact with a sore, drainage, used dressings, towels, clothing, or bedding. Keeping sores covered, washing your hands, and not sharing personal items can reduce transmission.

Does ecthyma always leave a scar?

Scarring is common but not inevitable. The size and depth of the ulcer, how quickly treatment begins, and how your skin heals all play a part. Darker or lighter skin colour may remain even when there is little change in texture.

How long does ecthyma take to heal?

Symptoms should begin to improve after effective treatment, but the ulcer may take several weeks to close. Larger or deeper sores may take longer. A sore that continues to enlarge or does not begin improving needs reassessment.

Can I go to work or school with ecthyma?

This depends on whether the sores can be covered, your symptoms, your work or school setting, and local infection-control rules. Jobs involving close skin contact, food handling, healthcare, or shared water may require additional precautions. Follow the advice given for your setting.

Can ecthyma come back?

Yes. Another infection can develop if bacteria enter broken skin again. Managing eczema, scabies, scratching, leg swelling, diabetes, or circulation problems may reduce recurrence. Repeated infections may need cultures and further assessment.

Sources

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