CONDITION

Perianal streptococcal cellulitis

Perianal streptococcal cellulitis is a bacterial infection causing painful, bright-red skin around the anus.

WHAT IT IS
Bacterial infection of skin around the anus

BODY SYSTEM
Skin around the anus

MAIN SYMPTOMS
Bright-red skin, pain, itching, blood-streaked stool

WHAT CAUSES IT
Group A Streptococcus bacterial infection

HOW IT IS DIAGNOSED
Perianal swab with bacterial culture

MAIN TREATMENT
Oral antibiotics, sometimes with topical antibiotic

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

IS IT AN EMERGENCY?
Sometimes - rapidly spreading redness with severe illness

LONG-TERM OUTLOOK
Usually full recovery, but recurrence can happen

Overview

Perianal streptococcal cellulitis is an infection of the skin around the anus. It is also commonly called perianal streptococcal dermatitis. "Perianal" means around the anus, while "cellulitis" means a bacterial infection involving the skin and nearby soft tissue.

The condition is caused most often by group A Streptococcus , the same type of bacterium that can cause strep throat and some skin infections. It mainly affects children, although adults can develop it.

The infection usually creates a sharply outlined area of bright-red, sore skin. It can make bowel movements painful and may cause small amounts of blood on toilet paper or on the outside of the stool. Unlike many deeper infections, it often causes no fever or general illness.

Perianal streptococcal cellulitis matters because it can look like eczema, a fungal rash, pinworms, or irritation from wiping. These conditions require different treatment. Once the infection is identified, antibiotics like amoxicillin or doxycycline are usually effective.

Symptoms

The most noticeable sign is an area of bright-red skin directly around the anus. The edge may be clearly defined rather than fading gradually into normal skin. The skin can look moist, swollen, cracked, or raw.

Common symptoms include:

Some children become irritable or resist using the toilet because they expect it to hurt. Younger children may not be able to explain where the pain is.

Fever and severe illness are not typical. Their presence may suggest that the infection is spreading or that another condition is involved. Symptoms elsewhere, such as a sore throat, may occur if there is also a streptococcal throat infection.

- Pain, burning, or itching around the anus
- Pain when passing stool
- Small streaks of bright-red blood on toilet paper or stool
- Mucus, discharge, or dampness around the anus
- Constipation caused by avoiding painful bowel movements
- Cracks in the skin, sometimes called fissures

Causes and risk factors

Perianal streptococcal cellulitis is usually caused by group A Streptococcus . The bacteria can be carried in the throat or on the skin without always causing symptoms.

The exact route of infection is not always clear. Bacteria may reach the perianal area on the hands after touching the mouth, nose, infected skin, or a contaminated surface. Close contact between family members can also allow the bacteria to spread.

The condition is most often recognised in young children. Factors that may make transmission more likely include close household contact, shared towels, crowded settings, and another recent streptococcal infection in the child or family.

This infection is not proof of poor hygiene or inadequate parenting. Group A streptococcal

bacteria spread easily, and careful families can still experience infections or recurrences.

Adults can develop the condition, particularly if they have close contact with an affected child. Symptoms in an adult still need medical assessment because several other conditions can cause a similar rash.

Diagnosis

A healthcare professional will examine the skin and ask about pain, itching, bleeding, bowel habits, fever, and recent throat or skin infections.

The diagnosis is confirmed by gently rubbing a sterile swab over the affected perianal skin and sending it for bacterial culture. A culture allows a laboratory to grow and identify the bacteria. It can also help determine which antibiotics are likely to work.

A rapid group A strep test may sometimes provide an earlier result. These tests were designed mainly for throat samples, however, and their use on perianal skin can differ between healthcare settings. A negative rapid result may still need a laboratory culture when the appearance strongly suggests this infection.

A throat swab may be considered if there is a sore throat, repeated infection, or concern that the throat is acting as a source of bacteria. Household members with symptoms may also need assessment.

Other causes of perianal redness include irritation from stool or wiping, eczema, psoriasis, fungal infection, pinworms, anal fissures, and inflammatory bowel conditions. Visual appearance alone may not reliably separate these from a streptococcal infection.

Treatment and management

Treatment normally involves an antibiotic taken by mouth. The choice and length of treatment are based on the culture result, local prescribing guidance, allergies, and the person's medical history. A topical antibiotic applied to the skin is sometimes added, but topical treatment alone may not be enough.

It is important to complete the prescribed antibiotic course, even if pain and redness improve quickly. Do not use leftover antibiotics or share medicine with another person.

Gentle skin care can make recovery more comfortable. The area can be rinsed with lukewarm water and patted dry rather than rubbed. Fragranced wipes, bubble bath, and harsh soaps may increase irritation. Loose clothing and breathable underwear may reduce friction.

A plain barrier ointment may protect sore skin from stool, but it does not treat the bacterial infection. Ask a healthcare professional or pharmacist which skin products are suitable.

Pain during bowel movements can lead to stool withholding and constipation. Fluids, age-appropriate fibre, and regular toilet opportunities may help. Persistent constipation or severe pain should be discussed with a healthcare professional rather than treated with an unplanned laxative regimen.

Steroid like prednisone or hydrocortisone creams should not be used as the only treatment for a suspected bacterial infection. They can reduce redness temporarily without removing the bacteria and may make the diagnosis less clear.

Complications

Most people recover without lasting effects when the infection is identified and treated. The main difficulty is recurrence: symptoms can return after apparently successful treatment. This may happen because bacteria remain in the throat or on the skin, treatment did not fully clear the infection, or the person was exposed again.

Pain may cause a child to avoid passing stool. This can lead to constipation, harder stools, and further cracking of the skin. Treating both the infection and any ongoing bowel difficulty can break this cycle.

The infection can occasionally spread into surrounding skin or form a collection of pus called an abscess. Increasing swelling, rapidly expanding redness, worsening tenderness, fever, or general illness need prompt assessment.

Group A streptococcal infections can rarely be followed by immune-related complications affecting other parts of the body. New dark urine, reduced urination, swelling around the eyes or legs, or unexplained joint symptoms should be assessed. These symptoms have many possible causes and do not automatically mean a complication has occurred.

Prevention

Perianal streptococcal cellulitis cannot always be prevented. Group A streptococcal bacteria may be carried without symptoms, so the source is not always visible.

Practical steps that may reduce spread include washing hands after using the toilet or helping a child with toileting, washing hands before eating, keeping fingernails short, and avoiding shared towels or washcloths during an active infection. Regular cleaning of toilet seats and frequently touched bathroom surfaces is reasonable.

Wash underwear and towels normally after use and allow them to dry fully. There is usually no need to disinfect the entire home.

Household members should not take antibiotics simply because someone else has the condition. If another person develops a sore throat, perianal redness, or a suspicious skin infection, they should be assessed. Testing household members may be considered when infections repeatedly return.

Living with it and what to expect

Pain, itching, and redness often begin to improve within a few days of starting an effective antibiotic. The skin may take longer to return to its usual colour, especially if it was cracked or inflamed. Improvement is expected, but the timing is not identical for everyone.

Children can usually continue ordinary quiet activities as comfort allows. Advice about school or childcare attendance may be based on local infection-control rules and how long antibiotic treatment has been taken. Good hand hygiene remains important.

A routine follow-up may be advised to check that the skin has healed and bowel movements are comfortable. Some healthcare professionals repeat a perianal culture, particularly when symptoms continue or have returned before.

If symptoms are not clearly improving after a few days, contact the prescribing service. The diagnosis, culture result, medicine, and whether each dose was taken may need review. Do not start a second course of leftover medicine.

Recurrence is possible over the following weeks or months, but it does not usually mean there is a long-term skin problem or a weak immune system. Repeated episodes may lead to further cultures and assessment for a source in the throat, skin, or household.

When to get medical help

Arrange a medical appointment soon for a bright-red, painful rash around the anus, especially when there is pain with bowel movements, blood-streaked stool, discharge, or persistent itching. These symptoms should not be assumed to be simple irritation.

Seek urgent same-day care if there is:

Seek emergency help for severe drowsiness, confusion, fainting, breathing difficulty, pale or mottled skin, or rapidly spreading redness accompanied by severe illness. These findings are not typical of uncomplicated perianal streptococcal cellulitis.

- Fever with increasing redness or pain
- Redness spreading quickly beyond the perianal area
- A painful lump, marked swelling, or pus
- Difficulty passing urine or stool
- Repeated vomiting, poor fluid intake, or signs of dehydration
- Worsening symptoms despite antibiotic treatment

Common questions

Is perianal streptococcal cellulitis the same as strep throat?

The same group A streptococcal bacteria can cause both conditions, but the site of infection is different. A person may have a throat infection at the same time, carry the bacteria in the throat without symptoms, or have no throat involvement.

Is it contagious?

The bacteria can pass between people through close contact, hands, respiratory secretions, or shared personal items. The rash itself does not spread simply by being looked at or by being in the same room. Handwashing and avoiding shared towels can reduce transmission.

Can it look like a yeast infection or nappy rash?

Yes. Several conditions cause redness around the anus. Streptococcal infection often produces intense, sharply bordered redness with pain, but appearance alone cannot always confirm the cause. A perianal swab helps separate bacterial infection from fungal or irritant rashes.

Why is there blood when wiping?

Inflamed skin can crack and bleed slightly, particularly during a painful bowel movement. Blood is usually bright red and present in small streaks. Bleeding that is heavy, persistent, mixed throughout the stool, or accompanied by black stool needs prompt medical assessment.

Why did it come back after antibiotics?

Recurrence may follow incomplete clearance, missed doses, bacteria carried in the throat or on the skin, or contact with another carrier. A new swab is often useful because redness after treatment is not always caused by the same infection.

Can adults get perianal streptococcal cellulitis?

Yes, although it is recognised more often in children. Adults with perianal pain or redness

should be examined because infections, inflammatory skin conditions, and other anorectal problems can produce similar symptoms.

Sources

- Gualtieri R, Bronz G, and colleagues. "Perianal streptococcal disease in childhood: systematic literature review." European Journal of Pediatrics . 2021;180:1727-1732.
- Herbst RA. "Perineal streptococcal dermatitis/disease: recognition and management." American Journal of Clinical Dermatology . 2003;4(8):555-560.
- Kokx NP, Comstock JA, Facklam RR. "Streptococcal perianal disease in children." Pediatrics . 1987;80(5):659-663.
- Brilliant LC. "Perianal streptococcal dermatitis." American Family Physician . 2000;61(2):391-393.
- DermNet New Zealand. "Perianal streptococcal dermatitis." Clinical dermatology reference article.