CONDITION

Stasis dermatitis and ulcers

Stasis dermatitis is lower-leg inflammation that can lead to open sores when damaged veins allow blood and fluid to collect.

WHAT IT IS
Lower-leg inflammation and sores caused by poor vein circulation

BODY SYSTEM
Skin and circulation

MAIN SYMPTOMS
Swelling, itching, skin discoloration, open sores

WHAT CAUSES IT
Poor leg-vein circulation and fluid buildup

HOW IT IS DIAGNOSED
Skin examination and leg circulation tests

MAIN TREATMENT
Compression, skin care, wound care, and vein treatment

CAN IT BE CURED?
Sometimes - ulcers heal, but vein damage may persist

IS IT AN EMERGENCY?
Sometimes - severe infection or sudden breathing trouble

LONG-TERM OUTLOOK
Usually manageable, but ulcers can return

Overview

Stasis dermatitis is inflammation of the skin caused by poor blood flow through the leg veins. It mainly affects the lower legs and ankles. "Stasis" means that blood and fluid are collecting rather than moving normally.

Leg veins contain valves that help blood return to the heart. If these valves are damaged or weakened, pressure builds inside the veins. Fluid then leaks into nearby tissues, causing swelling and skin inflammation. This is part of a broader problem called chronic venous insufficiency.

Over time, the skin may become itchy, discolored, thickened, or fragile. A break in the skin can develop into a venous ulcer, which is an open sore related to poor vein circulation. These ulcers often form near the inside of the ankle.

Stasis dermatitis is not contagious. It matters because untreated inflammation and swelling can damage the skin, while ulcers may be painful, slow to heal, or prone to returning. Treatment aims to control swelling, protect the skin, heal any ulcer, and address the underlying vein problem when possible.[1][2]

Symptoms

Symptoms usually affect the lower legs. Both legs may be involved, although one can be worse.

Early symptoms may include:

Long-standing inflammation may make the skin firm, thick, shiny, or easily injured. Brown discoloration can develop when blood cells leak into the tissues and leave iron-containing pigment behind. This discoloration may remain even after swelling improves.

A venous ulcer is usually shallow, with an uneven border. It may leak clear fluid and have yellow, red, or dark tissue on its surface. The surrounding skin may be swollen, itchy, or hardened.

Pain varies. Some venous ulcers ache, especially with swelling, while others are more painful because of infection or another circulation problem. Severe pain that is new or out of proportion to the wound needs prompt assessment.

- Ankle or lower-leg swelling, often worse later in the day
- Itching, dryness, scaling, or tenderness
- Red, purple, brown, or darker skin, depending on skin tone
- Aching, heaviness, or tightness in the legs

Causes and risk factors

The direct cause is ongoing high pressure in the leg veins. This commonly happens when vein valves no longer close properly. Blood can then flow backward and pool in the lower leg.

Previous deep vein thrombosis, or DVT, can damage the valves. A DVT is a blood clot in a deep vein. Varicose veins can also be linked with poor valve function.

Factors associated with stasis dermatitis and venous ulcers include:

Some heart, kidney, or liver conditions can also cause leg swelling. However, swelling from these conditions is not automatically stasis dermatitis. More than one cause may be present.

An ulcer may begin after a small cut, scratch, knock, or area of severe scratching. Sometimes it

develops without a memorable injury because the skin has become fragile.

- A history of DVT or other leg-vein disease
- Varicose veins
- Previous leg injury, fracture, or surgery
- Long periods of sitting or standing
- Reduced walking or limited ankle movement
- Leg swelling
- Higher body weight
- Pregnancy or previous pregnancies
- Increasing age

Diagnosis

Stasis dermatitis is usually diagnosed from the appearance of the skin, the location of the changes, and your medical history. A clinician may look for swelling, varicose veins, skin thickening, discoloration, and ulcers. They may also check pulses and compare both legs.

If you have an ulcer or may need compression treatment, the blood supply through your arteries may be checked. A common test compares blood pressure at the ankle with blood pressure in the arm. It is called an ankle-brachial pressure index, or ABPI. Other circulation tests may be needed when this result is unreliable.

A duplex ultrasound uses sound waves to examine blood flow and vein valves. It can help identify damaged veins, backward blood flow, or a possible clot.[3]

A wound swab is not routinely needed because many open ulcers contain bacteria without being infected. It may be taken when there are signs of infection. An unusual or non-healing ulcer may need a small skin sample, called a biopsy, to rule out another condition.

Other conditions can look similar, including cellulitis, contact allergy, blood clots, arterial ulcers, and some inflammatory skin conditions. This is why a new rash or ulcer should be assessed rather than assumed to be stasis dermatitis.

Treatment and management

Treatment usually combines swelling control, skin care, wound care, and management of the

underlying vein problem.

Compression is a main treatment for venous swelling and ulcers. Compression bandages or stockings apply controlled pressure to help blood and fluid move up the leg. Active ulcers may require a bandage system applied by a trained professional. Compression improves venous-ulcer healing compared with no compression.[4]

Compression is not suitable for every circulation problem. The arterial blood supply may need to be checked before strong compression is used. Stockings also need the correct size and type.

Skin care helps repair the skin barrier. A plain, fragrance-free moisturizer can reduce dryness and cracking. A clinician may recommend a topical corticosteroid for a limited period to calm inflamed, itchy skin. This treats inflammation but does not repair damaged vein valves.

Avoid scratching where possible, as it can break fragile skin. Some antiseptics, antibiotic like amoxicillin or doxycycline creams, fragrances, and dressing adhesives can cause contact dermatitis, which is an allergic or irritant reaction.

Ulcer care may include gentle cleaning, removal of dead tissue when appropriate, and a dressing that manages fluid while protecting the wound. Dressing choice is based on the wound's size, depth, drainage, and surrounding skin.

Antibiotics treat infection; they do not make an uninfected venous ulcer heal faster. Pain relief may also form part of the care plan.

Movement and elevation can reduce fluid buildup. Walking uses the calf muscles to help pump blood upward. Raising the legs when resting may also reduce swelling, if this is safe and practical for you.

Vein procedures may be offered when ultrasound shows treatable abnormal veins. Options can include closing a damaged vein with heat or an injected substance, or removing selected veins. In suitable people, treating superficial venous reflux can support ulcer healing and lower the risk of recurrence.[3][5]

Complications

Possible complications include:

Infection can occasionally spread into deeper tissues or bone. This is not the usual course, but a worsening wound or signs of infection need timely assessment.

Persistent pain, itching, drainage, and bulky dressings can affect sleep, mobility, work, and mood. A care plan should consider these effects as well as the wound itself.

- Cellulitis, an infection of the deeper skin
- Increasing pain or drainage from an infected ulcer
- Scarring and lasting skin discoloration
- Hardening of the skin and tissue beneath it
- Contact allergy to creams, adhesives, or dressings
- Repeated ulcer breakdown after healing

Prevention

Stasis dermatitis cannot always be prevented. Damage to vein valves may be permanent, especially after a DVT or major leg injury.

If you already have venous disease, controlling swelling and protecting the skin may reduce flare-ups and ulcers. Measures can include:

After an ulcer heals, ongoing compression is often used to reduce the chance that it will return. Compression should be reviewed if it causes unusual pain, numbness, color change, or skin damage.

Treating suitable varicose veins or other venous problems may also reduce future complications. Prevention plans need to account for arterial circulation, mobility, and other health conditions.

- Using prescribed or recommended compression correctly
- Walking and moving your ankles regularly
- Elevating your legs when advised
- Moisturizing dry skin and avoiding scratching
- Protecting the lower legs from cuts and knocks
- Checking the skin for cracks, blisters, or new sores

Living with it and what to expect

Stasis dermatitis is usually a long-term condition because the underlying vein damage often remains. Symptoms can improve greatly when swelling is controlled, but they may return if fluid builds up again.

Itching, redness, and scaling may settle over days or weeks with appropriate treatment. Brown

skin discoloration and hardened tissue often improve more slowly and may not disappear completely.

Venous ulcers commonly take weeks or months to heal. Larger or long-standing ulcers may take longer, particularly when swelling is difficult to control or other health problems affect healing. Even a fully healed ulcer can reopen.

Regular follow-up may involve checking the skin, measuring an ulcer, changing dressings, and reviewing compression. If healing is slower than expected, the diagnosis, circulation, infection risk, and treatment plan may be reassessed.

Most people can remain active. Walking and ordinary movement are often helpful, although pain, balance problems, or other medical conditions may require an adjusted plan. Learning how to care for the skin and use compression can make long-term management easier.

When to get medical help

Arrange a routine appointment if you develop ongoing lower-leg swelling, itching, discoloration, or thickened skin. A new open sore should also be assessed, even if it is small. Early care can help limit skin damage and identify the type of circulation problem.

Seek urgent medical care if:

Call emergency services for sudden shortness of breath, chest pain, coughing up blood, fainting, or severe confusion. These symptoms can be associated with a blood clot in the lungs or a serious infection and need immediate assessment.

- Redness, warmth, swelling, or pain is spreading quickly
- You have fever or feel significantly unwell with a leg wound
- The ulcer develops pus, a bad smell, or rapidly increasing drainage
- The skin becomes black, or the foot becomes cold, pale, or numb
- There is sudden major swelling or pain in one leg
- Bleeding from an ulcer does not stop with firm pressure

Common questions

Can stasis dermatitis go away?

The inflammation can settle, and ulcers can heal. However, damaged vein valves may not recover, so swelling and skin inflammation can return. Long-term compression and skin care

are often needed.

Is stasis dermatitis the same as cellulitis?

No. Stasis dermatitis is inflammation caused by poor vein circulation, while cellulitis is a bacterial skin infection. Both can cause redness and swelling. Cellulitis is more likely to cause rapidly spreading warmth, tenderness, and fever, but an examination may be needed to tell them apart.

Are venous ulcers contagious?

No. A venous ulcer cannot spread from one person to another. An ulcer may contain bacteria or become infected, but the underlying ulcer is caused by circulation and skin damage.

Should I walk if I have a venous ulcer?

Walking is often encouraged because calf-muscle movement helps return blood toward the heart. Your activity plan may need to change if you have severe pain, poor arterial circulation, balance problems, or another condition that limits walking.

Can I put moisturizer on a venous ulcer?

Moisturizer is generally used on dry, intact skin around the ulcer, not inside the open wound unless a wound-care professional recommends a specific product. Products containing fragrance or common allergens may irritate sensitive skin.

Why does stasis dermatitis itch so much?

Fluid buildup triggers inflammation and weakens the skin barrier. The skin then becomes dry and sensitive, which causes itching. Scratching can worsen inflammation and create breaks that may become ulcers.

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