

Foot and Toe Ulcers

Ulcers, wounds in your skin that can get infected and take a long time to heal, are sometimes found on your feet and toes. People with diabetes who have neuropathy are most likely to get these ulcers. Ulcers can get infected and sometimes require amputation of your foot or toes. Healing the ulcer might include nonsurgical and surgical treatments

Overview

?What are foot and toe ulcers

An ulcer is an open wound or sore that will not heal or keeps returning. When you have ulcers on your feet and toes, it can be related to diabetes — specifically, a complication called neuropathy that causes you to lose feeling in your feet. A scrape, cut or puncture in your skin can turn into an ulcer, but you might not know it's there if you have neuropathy

Ulcers can lead to infections. Sometimes, the infection won't go away and you may need to have part of your foot or toe surgically removed (amputated). About 15% of people with diabetes will get a foot or toe ulcer. Around 14% to 24% of people with diabetes in the U.S. need an amputation after they get an ulcer

?Who gets foot and toe ulcers

Foot and toe ulcers can happen to many people but might be more common in Black, Native American and Hispanic people. If you have an eye, kidney or heart disease related to diabetes, you're also at a higher risk. About 15% of people with diabetes will get an ulcer, typically on the bottom of their foot. Some of those people will be hospitalized because of complications

:You're also at a higher risk of getting foot and toe ulcers if you have any of the following conditions

.Blood circulation issues

.Heart disease

.Obesity

.A foot condition like a bunion or hammertoe

.Kidney disease

Lifestyle behaviors like using tobacco and alcohol can also increase your risk of developing ulcers on your feet or toes

?What do foot and toe ulcers look like

Ulcers are open wounds in your skin that can take on almost any shape. Some shapes are more common than others on specific parts of your body. For example, ulcers on your foot or toe might be shaped like a crater or a wedge

:Foot and toe ulcers vary in color. The most common colors are

.Yellow

.Pink

.Red

.Grey

.Black

.(If your ulcer is black, that means cells in the tissues have died. This is called necrosis (gangrene

?How big are foot and toe ulcers

There are many different sizes of ulcers. They start as small as 1 centimeter wide (about the size of a pea or a Cheerio) and can grow to the size of your entire foot if left untreated

The depth of the ulcer can change, too. Several different classification systems exist to define the depth of an ulcer. The Wagner Diabetic Foot Ulcer Grade Classification System, for example, has six :grades

.(Grade 0: Your skin is intact (undamaged

Grade 1: The ulcer is “superficial,” which means that the skin is broken but the wound is shallow (in .(the upper layers of the skin

.Grade 2: The ulcer is a “deep” wound

.Grade 3: Part of the bone in your foot is visible

.(Grade 4: The forefront of your foot (the section closest to your toes) has gangrene (necrosis

.Grade 5: The entire foot has gangrene

?How can I tell if I’m getting an ulcer on my foot or toe

:When an ulcer is starting to develop on your foot or toe, you might notice changes in your skin like

- .Dry skin
- .Cracked skin
- .Scaly skin
- .Redness
- .Rashes

As the ulcer gets worse, it can get wider, and longer and deeper — sometimes down to the bone. In advanced stages you might see

- .A callus
- .A halo (ring) around the center of the wound that feels harder than the skin around it
- Drainage (you might see this in your socks when you take them off), which is a sign that you might have an infection
- .A brown discoloration
- .A strong odor

?How are foot and toe ulcers diagnosed

:Your healthcare provider can tell what type of ulcer you have based on four observations

- .The appearance of the ulcer
- .Location of the ulcer
- .The appearance of the borders
- .The appearance of the surrounding skin

Your primary healthcare provider can diagnose an ulcer, but they might send you to a specialist for treatment. You might see a podiatrist, a provider who works with feet, or a wound specialist. For more complicated cases that require surgery, you might also see a plastic surgeon, anesthesiologist, orthopedic surgeon and/or vascular surgeon

?What tests are done to determine if I have a foot or toe ulcer

To find out precisely how deep the ulcer goes, and to see if it caused an infection in a nearby bone, they might order a

.MRI

.CT scan

.X-ray

?What are the types of foot and toe ulcers

:Two types of ulcers can affect your feet and toes

.Neuropathic (diabetes-related) ulcers

.Arterial (ischemic) ulcers

?What are neuropathic ulcers

Neuropathic ulcers occur primarily in people with diabetes, although they can affect anyone who has impaired sensation in their feet. They can be found anywhere on your feet, but they usually .(develop on the parts of your feet and toes that are most sensitive to weight (pressure points

Neuropathic ulcers don't cause pain. But they can be serious if they aren't treated promptly or they .don't respond to treatment

:A neuropathic ulcer might be the following colors

.Pink

.Red

.Brown

.Black

.Any combination of those colors

The thin borders of the ulcers are "punched out," meaning that they're taller than the surrounding .tissues

?What are arterial ulcers

A condition called peripheral arterial disease can reduce blood flow to your extremities. When this happens, your foot tissue may start to die. The ulcers that form from reduced blood flow are called arterial ulcers

The word “arterial” means “relating to arteries.” Arteries are blood vessels that transport blood from your heart to the rest of your body, including your feet and toes. Anyone can get an arterial ulcer, but people who smoke or have diabetes, high blood pressure or high cholesterol are at higher risk

:Unlike neurotrophic ulcers, arterial ulcers can form on many parts of your body, including

.On your heels

.On the tips of your toes

.(Between your toes (where your toes rub together

.The bony parts of your feet and toes that rub against bed sheets, socks or shoes

The nail bed (if your toenail cuts into your skin, if your toenail was trimmed aggressively or if you had .(an ingrown toenail removed

:Arterial ulcers are

.Yellow

.Brown

.Grey

.Black

Arterial ulcers don't bleed. The borders and surrounding skin usually appear taller. If you have an infection or experience irritation, you might see swelling and redness around the base of the ulcer. The redness often turns to a pale white or yellow color if you elevate your leg. Arterial ulcers are .typically very painful, especially at night

Possible Causes

?What causes foot and toe ulcers

There are many possible reasons why you might get foot and toe ulcers. The most common causes :include

- .Neuropathy from diabetes
- .Cellulitis, a common bacterial infection
- .Trauma to the foot or toe
- .(Poor circulation (caused by a variety of conditions
- .Peripheral arterial disease
- .Unusually formed toes
- .An unusual walk that puts too much pressure on one part of your foot or toe
- .Friction when your foot or toe rubs against the toe box of your shoe

Although they don't cause ulcers, foot and toe ulcers are often found alongside toe conditions such as hammertoe, mallet toe and claw toe

?Are foot and toe ulcers contagious

No, foot ulcers aren't like other foot conditions that might be passed from person to person (contagious). You can't spread a foot or toe ulcer to — or catch it from — someone else

Care and Treatment

?How are foot and toe ulcers treated

The treatment of all ulcers begins with careful skin and foot care. Inspecting your skin is very important, especially for people with diabetes. Detecting and treating foot and toe sores early can help you prevent infection and keep the sore from getting worse

The goal of treating a foot or toe ulcer is to heal your wound and relieve any pain. Your treatment plan will be individualized based on what medical condition is causing your ulcers. If you can't correct the cause of your ulcer, it's likely to come back after treatment

There are both surgical and nonsurgical treatments for foot and toe ulcers. For early-stage foot and toe ulcers, nonsurgical treatments might work. More advanced ulcers — especially ones that are infected — might require surgery

:Nonsurgical treatments include

Topical wound care. (Ulcers have less of a risk of infection and heal faster if they're kept covered and moist)

.Antibiotics

.Antiplatelet or anticoagulation medications

.Compression clothes

.Draining

.Prosthetics

.Orthotics

Removing pressure from the area by wearing a cast, a certain shoe or braces. You might need to use crutches or a wheelchair. This is called nonsurgical off-loading

.Elevation of the foot

:Invasive and surgical treatments include

.(Debridement (the removal of infected tissue

.Hammertoe repair

.(Plantar exostectomy (the removal of parts of the sole of the foot

.(Achilles tendon lengthening (the stretching of the tendon

.(Metatarsal osteotomies (the metatarsal bone of the big toe is cut and realigned

.Shaving or removing bones

.(Tenotomy (the removal of scar tissue

.Reconstructive surgery using skin grafts

?How do I take care of my foot and toe ulcers

Your healthcare provider might teach you how to care for your ulcers at home. You might be instructed to

.Wash the affected area with mild soap

.Keep the wound clean and dry

.Change the bandages as directed

- .Take prescribed medications as directed
- .Drink plenty of fluids. Ask your healthcare provider how much water you should drink every day
- .Follow a healthy diet, as recommended by your healthcare provider
- .Exercise regularly, under your healthcare provider's care
- .Wear appropriate shoes
- .Wear compression wraps as directed

?How long does it take for an ulcer to heal

.(It might take weeks to months for an ulcer to heal (with treatment

?How can I reduce my risk of foot and toe ulcers

There are several things you can do to help reduce your risk of getting foot and toe ulcers.
:Sometimes, adopting these habits can even stop them from coming back. Try to

Manage your diabetes. If you have diabetes you should wear appropriate footwear and never walk
.barefoot

Examine your legs as well as the tops and bottoms of your feet and the areas between your toes every day. Look for any blisters, cuts, cracks, scratches or other sores. Also check for redness, increased warmth, ingrown toenails, corns and calluses. Use a mirror to view your leg or foot if necessary. If it's difficult to see, ask a family member to look at the area for you. See a healthcare provider immediately if you notice any problems

- .Talk to your healthcare provider about ways you can stop smoking
- .Manage your blood pressure
- .Regulate your cholesterol and triglyceride levels by changing your diet. Limit salt in your diet

Care for your toenails frequently. Cut your toenails after bathing, when they are soft. Cut toenails
.straight across and smooth with a nail file. Take care of ingrown toenails

- .Exercise
- .Maintain a healthy weight
- .See your podiatrist often
- .Wear appropriate shoes and socks. Talk to your podiatrist about what you need