

Foot Wounds and Ulcers in Diabetes

Why Foot Wounds Matter in Diabetes

If you have diabetes, foot wounds are serious and should never be ignored. Most amputations in people with diabetes **start with a small foot wound**.

Your skin is your body's natural shield against infection. Once the skin breaks, germs can get in and cause serious problems.

What Is a Foot Ulcer?

A **foot ulcer** is any open sore or break in the skin.

It can start very small, like:

- A blister
- A crack in dry skin
- A cut or puncture (like stepping on a nail)

Even small wounds can become dangerous if they are not treated early.

Why Do Foot Wounds Happen?

Foot wounds usually happen because of **pressure**, especially when feeling in the feet is reduced.

There are three main types of pressure:

1. **Constant pressure**
 - Example: lying in bed too long with pressure on the heel (Fig 1)
 - Example: tight shoes worn for hours (Fig 2)
2. **Sudden pressure**
 - Example: stepping on a nail or needle (Fig 3)

3. Repeated pressure (most common)

- Caused by walking on the same pressure point over and over (Fig4)
- Often linked to bunions, hammertoes, flat feet, or high arches (Fig5)
- Leads to calluses that can break open (Fig6)



Fig 1



Fig 2



Fig 3



Fig 4



Fig 5



Fig 6

Why Don't These Wounds Hurt?

Many people with diabetes have **neuropathy**, which means **loss of feeling** in the feet.

Because of this:

- You may not feel pain
- You may not notice a wound

- You may keep walking on it, making it worse

This is why daily foot checks are so important.

How Do Calluses Turn into Wounds?

Calluses form over pressure points.
Under the callus, the skin can:

- Blister (Fig 7)
- Bleed
- Break open

Once the skin opens, infection can start quickly (Fig 8).



Fig 7



Fig 8

Other Things That Increase Risk

Foot wounds are more likely if you have:

- Dry, cracked skin (especially heels) (Fig 9)
- Athlete's foot between the toes (Fig 10)
- Foot injuries
- Poor-fitting shoes
- Poor blood sugar control
- Poor blood flow(Fig 11)



Fig 9



Fig 10



Fig 11

How Are Foot Wounds Treated?

Treatment depends on the cause, but usually includes:

- **Taking pressure off the foot**
(special shoes, boots, casts, crutches, or scooters)
- **Keeping the wound clean and covered**
- **Watching closely for infection**

Some wounds need special dressings or advanced treatments chosen by your doctor.

How Long Does Healing Take?

There is no exact timeline.

A good sign:

- If the wound shrinks by **half within 4 weeks**, it usually heals within 6 months.

Healing depends on:

- Blood sugar control
- Staying off the foot
- Proper wound care

What Can Slow Healing?

1. High blood sugar

- Slows healing
- Makes infections harder to fight

2. Infection

- Warning signs: (Fig 12)
 - Redness
 - Swelling
 - Warmth
 - Drainage
 - Fever or chills (serious)



Fig 12

3. Poor blood flow (Fig 13)

- Blood brings oxygen, nutrients, and antibiotics
- Poor circulation can stop healing



Fig 13

Who Treats Diabetic Foot Wounds?

Foot wounds are best treated by a **team**, which may include:

- Podiatrists (foot doctors)
- Primary care doctors or endocrinologists
- Vascular (circulation) specialists
- Infection specialists

- Wound care nurses

The podiatrist often leads foot care treatment.

How Can I Prevent Foot Wounds?

Prevention is the most important step.

Every day:

- Look at the bottoms of your feet
- Check between your toes
- Watch for redness, cracks, blisters, or swelling

Shoes:

- Check inside shoes before wearing them
- Avoid tight or rubbing shoes
- Wear protective slippers indoors
- Never walk barefoot, even at home

Act early:

- If you see a problem, **call your doctor right away**
- Early treatment saves time, money, and feet

Key Takeaway

Small foot problems can become big problems in diabetes.
Daily checks and early care can prevent infections, hospital stays, and amputations.