

YOUR PODIATRIC PHYSICIAN Talks About

Diabetic Wound Care



What is a Diabetic Foot Ulcer?

A diabetic foot ulcer is an open sore or wound that most commonly occurs on the bottom of the foot in approximately 15 percent of patients with diabetes. Of those who develop a foot ulcer, six percent will be hospitalized due to infection or other ulcer-related complication.

Diabetes is the leading cause of non-traumatic lower extremity amputations in the United States, and approximately 14 to 24 percent of patients with diabetes who develop a foot ulcer have an amputation. Research, however, has shown that the development of a foot ulcer is preventable.

Who Can Get a Diabetic Foot Ulcer?

Anyone who has diabetes can develop a foot ulcer. Native Americans, African Americans, Hispanics and older men are more likely to develop ulcers. People who use insulin are at a higher risk of developing a foot ulcer, as are patients with diabetes-related kidney, eye, and heart disease. Being overweight and using alcohol and tobacco also play a role in the development of foot ulcers.

How do Diabetic Foot Ulcers Form?

Ulcers form due to a combination of factors, such as lack of feeling in the foot, poor circulation, foot deformities, irritation (such as friction or pressure), and trauma, as well as duration of diabetes. Patients who have diabetes for many years can develop neuropathy, a reduced or complete lack of feeling in the feet due to nerve damage caused by elevated blood glucose levels over time. The nerve damage often can occur without pain and one may not even be aware of the problem. Your podiatric physician can test feet for neuropathy with a simple and painless tool called a monofilament.

Vascular disease can complicate a foot ulcer, reducing the body's ability to heal and increasing the risk for an infection. Elevations in blood glucose can reduce the body's ability to fight off a potential infection and also retard healing.

What is the Value of Treating a Diabetic Foot Ulcer?

Once an ulcer is noticed, seek podiatric medical care immediately. Foot ulcers in patients with diabetes should be treated for several reasons

such as, reducing the risk of infection and amputation, improving function and quality of life, and reducing health care costs.

How Should a Diabetic Foot Ulcer be Treated?

The primary goal in the treatment of foot ulcers is to obtain healing as soon as possible. The faster the healing, the less chance for an infection.

There are several key factors in the appropriate treatment of a diabetic foot ulcer:

- Prevention of infection.
- Taking the pressure off the area, called "off-loading."
- Removing dead skin and tissue, called "debridement."
- Applying medication or dressings to the ulcer.
- Managing blood glucose and other health problems.

Not all ulcers are infected; however if your podiatric physician diagnoses an infection, a treatment program of antibiotics, wound care, and possibly hospitalization will be necessary.

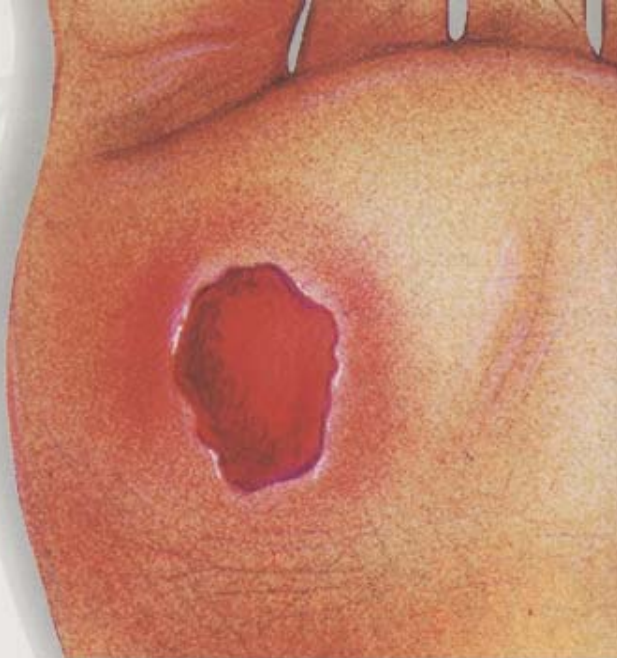
There are several important factors to keep an ulcer from becoming infected:

- Keep blood glucose levels under tight control.
- Keep the ulcer clean and bandaged.
- Cleanse the wound daily, using a wound dressing or bandage.
- Do not walk barefoot.

For optimum healing, ulcers, especially those on the bottom of the foot, must be "off-loaded." Patients may be asked to wear special footwear, or a brace, specialized castings, or use a wheelchair or crutches. These devices will reduce the pressure and irritation to the ulcer area and help to speed the healing process.

The science of wound care has advanced significantly over the past ten years. The old thought of "let the air get at it" is now known to be harmful to healing. We know that wounds and ulcers heal faster, with a lower risk of infection, if they are kept covered and moist. The use of full strength betadine, peroxide, whirlpools and soaking are not recommended, as this could lead to further complications.

Appropriate wound management includes the use of dressings and topically-applied medications. These range from normal saline to advanced products, such as growth factors, ulcer dressings, and skin substitutes that have been shown to be highly effective in healing foot ulcers.



problems that are discovered should be reported to your podiatrist as soon as possible, no matter how "simple" it may seem to you.

The key to successful wound healing is regular podiatric medical care to ensure the following "gold standard" of care:

- lowering blood sugar
- appropriate debridement of wounds
- treating any infection
- reducing friction and pressure
- restoring adequate blood flow

The old saying, "an ounce of prevention is worth a pound of cure" was never as true as it is when preventing a diabetic foot ulcer.



This pamphlet is one of a series produced by APMA that discusses several foot health conditions and concerns, including bunions, arthritis, athlete's foot, warts, foot orthotics, aging, children's feet, forefoot and rearfoot surgery, women's foot concerns, walking, heel pain, nail problems, footwear, and others. They are not meant to be substitutes for professional advice from your podiatric physician. The pamphlets are available from members of APMA. Or call:

Dr. Thomas Rambacher
Foot and Ankle Specialist
30001 Town Center RD Suite #2
Laguna Niguel, CA 92677
949-697-9594

ORTHO-McNEIL

This brochure is sponsored by an unrestricted educational grant from Ortho-McNeil Pharmaceuticals.