Diabetic Foot Ulcer

What is a diabetic foot ulcer?
A diabetic foot ulcer is a sore on the foot that can be red and painful. If it gets infected, pus may ooze out of the sore.

What causes diabetic foot ulcers?
Diabetes can damage the nerves and lead to a loss of feeling or numbness in your feet. This is called peripheral neuropathy. Because of the loss of feeling in your feet, a minor injury like a blister or stepping on a sharp object can cause a wound without you knowing it. If the sore (foot ulcer) is left untreated, it can lead to serious problems.

Nerve damage can also cause a loss of muscle strength in the feet, which changes the shape of the foot. These changes include hammer toes and bunions. Calluses and corns can increase pressure on the bottom of the foot.

Other things that may cause a foot ulcer include walking for long periods of time, stepping on a sharp object, cutting toenails or wearing shoes that don’t fit properly. Neuropathy can also affect sweat and oil glands in the feet. This causes dry, flaky skin that can crack and become infected.

In addition to nerve damage, people with diabetes often have poor blood flow to their legs and feet caused by narrowing or hardening of the blood vessels. Poor blood flow increases the risk of infection and slows healing. In severe cases, part or all of the foot may need to be removed.

What can you do to prevent complications?
People with diabetes often have trouble with their feet. Follow these tips to prevent complications:

Lose weight if you’re overweight.
- Being overweight can nearly double your chance of having complications caused by diabetes.

Don’t use tobacco.
- Using tobacco decreases blood flow, increasing the risk of infection.

For information about quitting, call the Kaiser Permanente Resource Line at 1-800-992-2279.

Protect your feet
- Always wear shoes and socks.
  - Don’t walk barefoot.
  - Wear shoes that fit well.
  - Check the insides of your shoes for torn linings, rough areas, or objects (such as pebbles or sticks) that can irritate your feet.
- Don’t let your feet get too hot or too cold.
- Wash your feet as directed.
Apply a moisturizing cream to the tops and bottoms of your feet. Don’t put cream between your toes.

- Check your feet every day.
  - Use a mirror to look at your feet and toes for problems.

**Keep good control of blood sugar levels**

High blood sugar levels can damage blood vessels and nerves and slow healing. To help avoid problems, keep your blood sugar levels as close to normal as possible.

Follow your doctor’s advice on diet and exercise. Keeping good control of your diabetes may help prevent problems caused by neuropathy or keep them from getting worse.

**Caring for a diabetic foot ulcer**

The most important goal in treating a foot ulcer is healing the wound quickly. The faster the wound is closed, the less chance there is for infection.

The standard treatment for a diabetic foot ulcer includes:

1. Cleaning and removing any dead tissue.
2. Regular use of a protective bandage or dressing.
3. Relieving pressure from the wound, called “offloading”.

Offloading can be done with bedrest, by using a wheelchair, or by wearing therapeutic footwear (special shoes), orthotics, or a walking cast.

Therapeutic footwear is specialized for each person. That can mean having customized shoes to help with foot problems, such as claw or hammer toe; wearing high tops to give the ankles stability; or adjusting the soles for stability. Custom orthotics, or shoe inserts, can relieve pressure, reduce friction, and cushion the foot. Walking casts range from splints to walkers.

Your doctor or nurse will help you find the products that work best for you.