Care of the Diabetic Foot

Diabetic foot problems are a major health concern and are a common cause of hospitalization.

Most foot problems that people with diabetes face arise from two serious complications of the disease: nerve damage and poor circulation. The lack of feeling and poor blood flow can allow a small blister to progress to a serious infection in a matter of days. Chronic nerve damage (neuropathy) can cause dry and cracked skin, which provides an opportunity for bacteria to enter and cause infection.

The consequences can range from hospitalization for antibiotics to amputation of a toe or foot. For people with diabetes, careful, daily inspection of the feet is essential to overall health and the prevention of damaging foot problems.

General Care of the Diabetic Foot

- Never walk barefoot. The nerve damage decreases sensation so you may not notice that little pebbles or objects have gotten stuck in your foot. This can lead to a massive infection. Always wearing shoes or slippers reduces this risk.
- Wash your feet every day with mild soap and warm water. Test the water temperature with your hand first. Do not soak your feet. When drying them, pat each foot with a towel rather than rubbing vigorously. Be careful drying between your toes.
- Use lotion to keep the skin of your feet soft and moist. This prevents dry skin cracks and decreases the risk of infection. Do not put lotion between the toes.
- Trim your toe nails straight across. Avoid cutting the corners. Use a nail file or emery board. If you find an ingrown toenail, see your doctor. Good medical care is important in preventing infections.
- Do not use antiseptic solutions, drugstore medications, heating pads, or sharp instruments on your feet. Do not put your feet on radiators or in front of the fireplace.
- Always keep your feet warm. Wear loose socks to bed. Do not get your feet wet in snow or rain. Wear warm socks and shoes in winter.
- Do NOT smoke. Smoking damages blood vessels and decreases the ability of the body to deliver oxygen. In combination with diabetes, it significantly increases your risk of amputation — not only of the feet, but can include the hands, as well.

Inspection
• Inspect your feet every day.

• Look for puncture wounds, bruises, pressure areas, redness, warmth, blisters, ulcers, scratches, cuts, and nail problems.

• Get someone to help you, or use a mirror if you are unable to do it alone. You may not feel that damage has occurred to the skin. Inspecting for skin breakdown is crucial.

• Look at and feel each foot for swelling. Swelling in one of the feet and not the other is an early sign that you may be experiencing early stages of Charcot (pronounced “sharko”) foot. This is a unique problem that can occur in people with nerve damage. It can destroy the bones and joints.

• Examine the bottoms of your feet and toes. Check the six major locations on the bottom of each foot:
  ◦ The tip of the big toe
  ◦ The base of the little toes
  ◦ The base of the middle toes
  ◦ The heel
  ◦ The outside edge of the foot
  ◦ Across the ball of the foot

**Shoewear**

Choose and wear your shoes carefully. A poor fitting shoe can cause an ulcer and lead to an infection.

• Buy new shoes late in the day when your feet are larger. Buy shoes that are comfortable without a "breaking in" period.

• Check how your shoe fits in width, length, back, bottom of heel, and sole. Have your feet measured every time you buy new shoes. Your foot will change shape over the years and you may not be the same shoe size you were 5 years ago.

• Avoid pointed-toe styles and high heels. Try to get shoes made with leather upper material and deep toe boxes.

• Wear new shoes for only 2 hours or less at a time. Do not wear the same pair every day.

• Inspect the inside of each shoe before putting it on. Do not lace your shoes too tightly or loosely.

• Avoid long walks without taking a break, removing your shoes and socks and checking for signs of pressure (redness) or ulcers.

**Orthotics**

Insurance companies frequently will cover the cost of orthotics for people with diabetes. They understand how important it is to minimize the risk of a pressure sore in these patients. Discuss this with your primary doctor or orthopedic surgeon.

An accommodative orthotic made from a soft material called plastizote is commonly prescribed. The orthotics should not be hard, as this will increase the risk of a pressure ulcer. The orthotic can be transferred from shoe to shoe and should be used at all times when standing or walking.

Last reviewed: December 2011

AAOS does not endorse any treatments, procedures, products, or physicians referenced herein. This information is provided as an educational service and is not intended to serve as medical advice. Anyone seeking specific orthopaedic advice or assistance should consult his or her orthopaedic surgeon, or locate one in your area through the AAOS Find an Orthopaedist program on this website

Copyright 2011 American Academy of Orthopaedic Surgeons
Related Links

Diabetic (Charcot) Foot (http://orthoinfo.aaos.org/topic.cfm?topic=A00655)
Orthotics (http://orthoinfo.aaos.org/topic.cfm?topic=A00172)