

Foot Care: Tips for keeping you on your toes

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As a rule, feet are taken for granted. But if you have diabetes, you cannot afford to ignore your feet. One in four people with diabetes develops foot problems—with extreme cases requiring amputation.

Significant progress has been made in preventing this dire result, however. In 1984, the Joslin-Beth Israel Deaconess Foot Center's amputation rate was 30%; that is, three out of 10 patients left the hospital without part or all of their foot. Today that rate is only about 8%.

Foot problems are a major challenge for people with diabetes because the disease affects the nerves and blood circulation. About 40% of people with diabetes develop neuropathy (nerve damage). At first, this can cause increased pain or discomfort. With time, however, the nerves are destroyed and

the person may lose the ability to feel pain or even minor injury. In addition to neuropathy, some people with diabetes develop vascular (blood vessel) disease, and, without adequate blood flow, may lose the ability to heal cuts or wounds.

Even a seemingly minor callus, if it gets infected, can lead to an ulcer (an open wound) that, in turn, can lead to a more widespread infection and even loss of part or all of the foot.

If you have painful neuropathy, improved diabetes control and some medications can relieve the discomfort. Although you cannot reverse the death of nerves that leads to loss of sensation, you can try to prevent it in the first place or halt its progression. Neuropathy is usually seen in people who have had diabetes more than 10 or 15 years, particularly in those who haven't had good blood glucose control. There are also ways of reducing the risk of vascular complications—through control of diet, blood pressure and lipid levels, and by not smoking cigarettes.

Initial treatment of foot ulcers always includes getting patients off their feet to relieve the pressure. Ulcers are often on the pressure points—the ball or heel of the foot. If necessary, the ulcer is debrided—that is, infected tissue is removed. In difficult cases, when healing isn't occurring, we can use "living skin equivalents" to cover the wound or apply topical growth factors to jump-start healing of the tissue.

We then identify the cause and try to reduce the likelihood of recurrence. If there's a foot deformity, like a bunion or hammertoe, the person may need corrective surgery. Maybe shoes are causing problems and need modifications. If the patient has vascular disease, we can try to restore blocked circulation through bypass surgery. Today there are also angioplasty and stenting procedures that are less invasive and may be used to clear the blockage in blood vessels. The only cases at our center that end in amputation occur when bypasses can't be performed for some reason, or when an infection has already caused too much bone and tissue loss.

Close Inspection

People with diabetes should learn how to inspect their feet carefully and frequently, or have someone else do it for them. I tell my patients that if they have lost the sensation of pain, they have to use another sense—their sight—to take its place. I advise them to look for any blisters, sores, swelling or cracks between the toes, and if they have pressure points, to wear padded socks or put inserts in their shoes.

Everyone with diabetes should see a podiatrist at least once a year. We do a series of examinations to check the status of circulation in the legs, nerve function and a simple two-minute "monofilament test" to assess if there is any protective sensation left in the foot. Then we know if someone is at risk for ulceration and should be followed more frequently. Foot ulcers are common, but quite preventable. The bottom line: If you take care of your feet, we can keep you on your toes.

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