

## DIABETES AND THE FEET

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All of us are likely to have problems with our feet, but diabetics may develop serious problems more quickly and have more complications, especially when circulation or nerves are impaired. A random survey of diabetic patients in the outpatient clinic of a Veteran's Administration hospital found 50% with circulation and nerve damage plus some type of foot deformity. **When circulation is poor**, the tissue is less able to fight infection. **When nerves are impaired**, an injury can occur without pain and as a result, may go unnoticed.

The key for the diabetic is to view all foot problems as **potentially dangerous** and to prevent them and seek podiatric care as soon as they occur.

Except for blindness, the complication most heard about diabetics is loss of a leg. This widespread concern is realistic.

--30% of all diabetics have peripheral vascular disease.

--Of all non-traumatic amputations in the U.S., 50% to 70% are performed on diabetics.

**Poor circulation** often happens in diabetics which can lead to serious complications. Chronically tired or painful feet may mean circulation is poor. Symptoms such as numbness, tingling, cold or blue feet, and swelling that will not go down indicate poor circulation. Cramping may occur at night, during rest, or while walking a short distance. Smoking and stress usually increase the severity of the symptoms. Examination by a podiatrist will reveal any circulatory deficiencies.

**Diabetic neuropathy** can cause sensitivity or a loss in ability to feel pain, heat or cold. If precautions are not taken, a hot bath can be a potential for a burn. Position sense is often lost in neuropathy so the feet scrape objects in their path. Diabetics can be unsteady on feet with loss of balance causing falls. Diabetic neuropathy can also affect the muscles of the feet causing deformity such as hammertoes.

When insensitivity is present, serious problems such as ulcers and gangrene can occur without pain. The infection may go unnoticed and appropriate care may be delayed until too late. By the time the trouble is discovered, amputation may be necessary to save the person's life. Daily observation of the feet is necessary by a diabetic, responsible family member, or other party.

**Ulcers** can be caused by lack of blood circulating to the foot, lack of soft tissue protection, excessive callus tissue, infection, and pressure points caused by deformities. Some causes of injury and ulcers are wearing ill-fitting shoes, performing self-surgery, applying electric heating pads or hot water bottles, and using ingrown toenail and corn remedies. If the circulatory response is adequate, most diabetic ulcers can be healed if diagnosed and treated early.

**Skin changes** in the foot can be caused by diabetes. Dehydration is common since the diabetic has less natural lubrication than the non-diabetic. Fissures and cracks in skin develop and often itching can become severe. Scratching can cause breaks in the skin that may become infected. Dryness can be helped by using a good skin cream daily on every part of the foot except between the toes.

**Cuts, scrapes, blisters, and puncture wounds** can cause serious problems. To prevent such injuries, diabetics should always wear some kind of footwear. If foreign bodies, such as splinters, become lodged in the foot, or if an infection or puncture wound occurs, the diabetic should be treated promptly by a professional.

**Ingrown toenails** can cause infections which tend to be especially severe in diabetics. To treat the problem, the podiatrist may drain the infection to relieve the pressure, prescribe an antibiotic, and recommend special home care to help the infection heal.

**Athlete's foot** is a fungal infection common in diabetics. If it or the skin rashes are not promptly treated, secondary bacterial infections that require vigorous treatment with antibiotics may develop.

**Structural changes** in the feet of healthy adults may also occur in the feet of diabetics and these problems can be far more serious because the disease causes changes in the nervous system. These changes in turn may prevent the diabetic from experiencing or expressing pain or discomfort and will require evaluation on a continuous basis to prevent serious bone and joint changes.

#### Important Diabetic Foot Care:

1. Do not ever walk barefoot.
2. Do not wear any shoes with open toes, soles or heels. Be sure to wear shoes or slippers with firm soles, especially outside of the house, in your yard or at the beach or pool.
3. Wear shoes that fit snugly but not tight. There should be ½ inch between the big toe and the shoe. The toe-box should be round and high to allow space for toe deformities. The upper portion of the shoe should be soft and flexible. The lining should be smooth and free of ridges, wrinkles and seams.
4. Rotate your shoes every day and keep your shoes in good condition.
5. Break in new shoes gradually and wear for only a few hours at first to prevent blisters and sore spots. Check your feet for red areas indicating too much pressure.
6. Check inside your shoes daily for sharp edges and foreign objects.
7. Do not soak your feet. This causes too much moisture between the toes and Athlete's foot.
8. Carefully and gently pat your feet dry (DO NOT RUB). Use a soft towel and remember to get in between the toes.
9. Use moisturizing cream in small amounts and massage into feet well twice a day. Do not apply between the toes.
10. Do not pull off loose pieces of skin.
11. Wear clean socks, change them daily and discard when worn out.
12. Inspect the socks daily for signs of drainage from an open sore that you may not realize you have because you cannot feel it.
13. Keep your toenails trimmed. Since you are diabetic, it is recommended that you visit a podiatrist regularly for cutting of your nails.
14. Do not attempt to trim your own corns or calluses.
15. Do not use commercial corn or wart remedies. These contain harmful acids that are very dangerous to diabetics.
16. Avoid extremes, such as cold or heat, and if your feet are cold, wear warm boots. Never use hot water bottles or heating pads.
17. Always avoid wearing anything tight around your legs or ankles that may in any way reduce or cut off the blood supply to your feet.
18. **Do not smoke!** Smoking constricts the blood vessels and directly affects the blood supply to your feet.
19. Do not cross your legs. It decreases circulation.
20. Do not expose your legs to prolonged sunlight.
21. Do not apply adhesive material such as moleskin or adhesive tape to the skin of the feet without first consulting your podiatrist.
22. Most importantly, examine your feet daily, including between your toes. If you have a difficult time seeing your feet, have a family member or friend do the inspections. If you find any sores, cuts, redness, swelling, pus, or blisters (**EVEN IF YOU HAVE NO PAIN**), report this to our office **immediately**.

If our office is not open at the time of your call, follow the instructions to reach us by beeper. We will then contact you shortly.

**PLEASE REMEMBER, PREVENTION IS THE BEST MEDICINE!**

Please have your family members review this information.

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