Diabetic Complications

People with diabetes are prone to many foot problems, often because of two complications of diabetes: nerve damage (neuropathy) and poor blood circulation. Neuropathy causes loss of feeling in your feet, taking away your ability to feel pain and discomfort, so you may not detect an injury or irritation. Poor circulation in your feet reduces your ability to heal, making it hard for even a tiny cut to resist infection. When you have diabetes, you need to be aware of how foot problems can arise from disturbances in the skin, nails, nerves, bones, muscles, and blood vessels. Furthermore, in diabetes, small foot problems can turn into serious complications. You can do much to prevent amputation by taking two important steps: Follow the proactive measures discussed below-and see your foot and ankle surgeon regularly.

Diabetes-related Foot and Leg Problems

Having diabetes puts you at risk for developing a wide range of foot problems:

- **Infections and ulcers (sores) that don't heal.**
Because of poor circulation in the feet, cuts or blisters can easily turn into ulcers that become infected and won't heal. This is a common-and serious-complication of diabetes and can lead to a loss of your foot, your leg, or your life. An ulcer is a sore in the skin that may go all the way to the bone.

- **Corns and calluses.**
When neuropathy is present, you can't tell if your shoes are causing pressure and producing corns or calluses. Corns and calluses must be properly treated or they can develop into ulcers.

- **Dry, cracked skin.**
Poor circulation can make your skin dry. This may seem harmless, but dry skin can result in cracks that may become sores.

- **Nail disorders.**
Ingrown toenails (which curve into the skin on the sides of the nail) and fungal infections can go unnoticed because of loss of feeling. If they're not professionally treated, they can lead to ulcers.

- **Hammertoes and bunions.**
Motor neuropathy (nerve damage affecting muscles) can cause muscle weakness and loss of tone in the feet, resulting in hammertoes and bunions. If left untreated, these deformities can cause ulcers.

- **Brittle bones.**
Neuropathy and circulation changes may lead to brittle bones (osteoporosis). This makes you susceptible to breaking a bone, even without a major blow or injury occurring. .

- **Charcot foot.**
This is a complex foot deformity. It develops as a result of loss of sensation and an undetected broken bone that leads to destruction of the soft tissue of the foot. Because of neuropathy, the pain of the fracture goes unnoticed and

the patient continues to walk on the broken bone, making it worse. This disabling complication is so severe that amputation may become necessary.

- **Blocked artery in the calf.**
  In diabetes, the blood vessels below the knee often become narrow and restrict blood flow. A severely blocked artery is a serious condition that may require intervention from a vascular surgeon. If vascular surgery fails and the wound does not heal, amputation may be necessary.

What Your Foot and Ankle Surgeon Can Do

A major goal of the foot and ankle surgeon is to prevent amputation. There are many new surgical techniques available to save feet and legs, including joint reconstruction and wound healing technologies. Getting regular foot checkups and seeking immediate help when you notice something can keep small problems from worsening. Your foot and ankle surgeon works together with other health care providers to prevent and treat complications from diabetes.

When Is Amputation Necessary?

The goals of treatment of diabetic foot problems are not only to save the life and limb, but also to get the patient healed and moving about as soon as possible. If vascular surgery cannot improve blood flow and podiatric surgery cannot restore function, amputation may be the only solution that gets the patient walking again. Amputation may involve one or two toes, part of the foot, or part of the leg. It is selected on the basis of the patient's condition and level of predicted healing. A return to normal life is especially possible today because of advances in prosthetics.

Your Proactive Measures

You play a vital role in reducing complications. Follow these guidelines and contact your foot and ankle surgeon if you notice any problems:

- **Inspect your feet daily.**
  If your eyesight is poor, have someone else do it for you. Inspect for: - Skin or nail problems -Look for cuts, scrapes, redness, drainage, swelling, bad odor, rash, discoloration, loss of hair on toes, injuries, or nail changes (deformed, striped, yellowed or discolored, thickened, or not growing). - Signs of fracture -If your foot is swollen, red, hot, or has changed in size, shape, or direction, see your foot and ankle surgeon immediately.

- **Observe for changes in circulation.**
  Pay attention to the color of your toes. If they turn red, pink, or purplish when your legs hang down while sitting, poor circulation may be a problem.

- **Don't ignore leg pain.**
  Pain in the leg that occurs at night or with a little activity could mean you have a blocked artery. Seek care immediately.

- **Nail cutting.**
  If you have any nail problems, hard nails, or reduced feeling in your feet, your toenails should be trimmed professionally.

- **No "bathroom surgery."**
  Never trim calluses or corns yourself, and don't use over-the-counter medicated pads.

- **Keep floors free of sharp objects.**
  Make sure there are no needles, insulin syringes, or other sharp objects on the floor.

- **Don't go barefoot.**
  Wear shoes, indoors and outdoors.

- **Check shoes and socks.**

  Shake out your shoes before putting them on. Make sure your socks aren't bunched up.
- **Have your sense of feeling tested.**

  Your foot and ankle surgeon will perform various tests to see if you've lost any feeling.