

Diabetes: What to Know Head to Toe

A Program of the American Diabetes Association

Taking care of Diabetes does make a difference. Your patients will feel better and be healthier from head to toe.

Speaking of feet...

Diabetes can harm the blood vessels and nerves in the feet. When it does, patients may not feel a cut or blister on their foot. Untreated, a cut or blister can lead to infection and possibly loss of a limb.

To keep feet healthy, patients should:

- ◆ Keep blood sugar close to their goal.
- ◆ Take off their shoes and socks and have their feet checked by their doctor at every visit.

The ADA has FREE Diabetes Patient Outcome Cards which list regular health checks for good diabetes care such as lab tests and exams. Also available, FREE pamphlets and posters.

Call 1-800-Diabetes!
(342-2383)

November is American Diabetes Month

A special thank you to all our
Certified Diabetes Educators...
Your education and style are much
appreciated...

YOU MAKE A DIFFERENCE!



The WebMaster

Website Options For Inquiring Minds

www.apma.org/

American Podiatric Medical Association
For diabetes education and foot facts.

[www.niddk.nih.gov/diabetes/feet/
brochure/index.htm](http://www.niddk.nih.gov/diabetes/feet/brochure/index.htm)

National Institute of Diabetes and Digestive
and Kidney Diseases
A guide for people with diabetes.



Diabetes and Foot Disease

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It has been estimated that 80% of the population, at one time or another, will have some type of foot problem. For the general population this may mean some inconvenience, discomfort or pain. For people with diabetes a foot problem can be tragic. Foot related problems are the number one cause of in-patient hospital days for patients with diabetes. Diabetes is the leading cause of non-traumatic amputations in the United States.

Two of the most common complications of diabetes, peripheral vascular disease (PVD) and diabetic neuropathy, adversely affect the lower extremities. PVD and neuropathy contribute to the 80,000+ lower extremity amputations per year in patients with diabetes. The economic and social costs are tremendous. The medical care cost of a lower extremity amputation exceeds that of a coronary bypass surgery. For the patient, the physical and psychological costs cannot be estimated.

Patients with diabetes should have their feet checked at every primary care visit. A thorough foot examination should be performed once a year, more often for patients at risk. To evaluate the circulation the posterior tibial and dorsalis pedis pulses should be palpated. Color, temperature, presence of digital hair and skin texture will assist in vascular evaluation. Doppler exams may be ordered if there is a question of vascular supply.

The presence of protective sensation is vital. Patients with diabetic sensory neuropathy lose the ability to feel pain. Even minor trauma goes unnoticed. Although the presence of a callus is often painful, those with neuropathy may walk on a callus without feeling pain. Eventually the increased pressure wears through the skin and forms an ulcer. Many ulcers are preceded by a non-painful callus. Most amputations are preceded by a non-healing ulcer. A history of callus formation or previous ulceration, therefore, are important risk factors to note when taking a history

A simple test for presence of protective sensation involves the use of a 5.07 Semmes-Weinstein monofilament fiber. The fiber will provide a standardized 10 grams of pressure when pressed upon the skin until the fiber, which looks like a piece of fishing line, bends. No pain is involved. The patient that does not feel the pressure is said to have loss of protective sensation (LOPS). They are at great risk for skin breakdown, are placed in an at risk category, and require special care.

Foot deformities are frequently encountered in patients with diabetic neuropathy. The nerve disease affects the muscles of the foot, causing an imbalance. A decrease in joint mobility may exist. Hammertoes, for example, are prevalent. Pressure on these digits causes irritations, corns, ulcers and eventual infections. Early surgery is often recommended to eliminate the pressure on these deformed toes and prevent future ulceration. Rocker bottom feet and bunions are two other common deformities. Patients with deformities, neuropathy or PVD must be referred for evaluation by a foot care specialist.

Autonomic neuropathy of the lower extremities may also create problems. Persons with autonomic neuropathy may have excessive skin dryness. The skin may fissure, allowing bacteria to invade. The regular use of skin emollients should be encouraged for these patients.



Mark Your Calendar!

Upcoming Meetings

American Diabetes Association Annual Advanced Postgraduate Course

◆ January 19 - 21, 2001
New York City

Abstract Deadline

All AADE members are encouraged to submit topics for presentations at the 2001 Annual Meeting, August 15-19, in Louisville, Kentucky.

Deadlines:

Concurrent/Workshop Sessions:

January 12, 2001

Research Presentations:

January 12, 2001

Educational Sharing:

June 1, 2001

For on-line abstract submission, visit www.aadenet.org.

(click on the "Annual Meeting" icon)

Current Approaches in Advanced Diabetes Management

A Professional Symposium

International Diabetes Center

Minneapolis, Minnesota

April 19 - 20, 2001

You will learn about:

- ◆ Aggressive management of glucose, lipids, blood pressure and tobacco use in your diabetes patients
- ◆ Integrating educational, behavioral and medical approaches for effective diabetes care

Call 1.888.825.6315 for more information.

Tell One... Tell All! Discussion Groups On-Line

Joslin Diabetes Center in Boston has TWO discussion groups available on-line (www.joslin.org) where people with diabetes and their family members can email questions about nutrition and coping with diabetes. **CHECK IT OUT...** and tell ALL your patients about it.



Submit items of interest for upcoming issues to:
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Shoe gear should also be examined. Improperly fitting shoes can apply abnormal pressure to the foot. The person without neuropathy will remove a shoe that causes pain because it is too small. The insensitive foot does not allow the painful stimuli to be felt, and the shoe is left on to do its damage. Many insurance companies, including Medicare, now help to pay for therapeutic shoes for people with diabetes that meet certain criteria. These criteria include foot deformity, poor circulation, neuropathy with callus formation, history of ulcer formation, or history of previous amputation. People with diabetes who meet any of these criteria should be encouraged to make use of this important benefit.

In order for patients and health care providers to prevent infections and amputations, a comprehensive foot care program must be a part of the diabetes care plan of every person with diabetes. A team approach has been shown to be most effective in providing protection for the diabetic foot. This team most often includes a podiatrist, a primary care physician, an endocrinologist, a pedorthist and a diabetes educator. Consultations are also sought as needed from specialists in infectious disease, vascular surgery, orthopedics, prosthetics, rehabilitation medicine, occupational therapy and physical therapy. When you see your patients with diabetes, be sure to ask if this team is in place.

Each member of the team plays a role in caring for the diabetic foot. Early identification of the foot that is at risk for amputation can lead to early intervention. A brief foot exam, performed at each visit, may take only 30 seconds and can potentially prevent a future disaster. Likewise, patients must examine their feet daily and notify the appropriate member of the team of any observed problems.

PATIENT INFORMATION:

To prevent foot problems from developing, people with diabetes should observe the following rules about their feet:

- ◆ Check your feet and toes daily. Look for any cuts, sores, bruises, bumps or infections. If you cannot see your feet, have a family member help. If abnormal changes are noted call your podiatrist (foot specialist).
- ◆ Wash your feet daily, using warm (not hot) water and a mild soap. Test the water temperature with your wrist before putting your feet in the water. Soaking is not recommended. Dry your feet gently with a soft towel.
- ◆ Lubricate your skin daily. Do not put moisturizer between the toes.
- ◆ Wear thick, soft socks. Materials that wick perspiration away from the skin are best.
- ◆ Wear shoes that fit your feet well. A pedorthist (certified shoe fitter) may help find the right style and size. Some insurance companies (including Medicare) help pay for shoes for people with diabetes. Ask your podiatrist about this program.
- ◆ Check your shoes before putting them on to make sure they have no tears, sharp edges or objects in them that might injure your feet.
- ◆ Never go barefoot, especially on the beach, hot sand or rocks.
- ◆ Cut your toenails straight across, but be careful not to leave any sharp corners that could cut the next toe. If you have poor circulation or diabetic neuropathy see a podiatrist for help.
- ◆ Use an emery board or pumice stone to file away dead skin. Do not try to cut off any growths yourself, and avoid using harsh chemicals such as corn, callus or wart removers on your feet.
- ◆ If your feet are cold at night wear socks. (Do not use heating pads or hot water bottles.)
- ◆ Avoid sitting with your legs crossed. Crossing your legs can reduce the flow of blood to the feet. Do not smoke; smoking affects blood circulation.
- ◆ Ask your doctor to check your feet at every visit. Remove your shoes and socks while you are waiting for him/her.
- ◆ Ask your podiatrist for specific recommendations for your foot care.

Neil M. Scheffler, DPM, FACFAS is a podiatrist in private practice in Baltimore, Maryland. He is President, Health Care & Education, Mid-Atlantic Region, American Diabetes Association and a member of the American Association of Diabetic Educators.

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