

## PROTOCOL OVERVIEW

This Clinical Protocol advises on guidelines and indications for Diabetic Foot Evaluation Foot problems are an important cause of morbidity in patients with diabetes mellitus. The lifetime risk of a foot ulcer for patients with type 1 or 2 diabetes may be as high as 34 percent.

- There is <u>no</u> requirement that the examination be performed by a podiatrist
- The purpose of the exam is to identify risk factors that may predict the development of ulcers or the need for amputation.
- All patients with diabetes should be examined to identify risk for foot ulceration. The feet should be visually inspected at each routine visit to identify problems with nail care, poorly fitting footwear resulting in barotrauma, fungal infections, and callus formation that may result in more severe foot problems

## **INDICATIONS**

- Perform a comprehensive foot evaluation at least annually to identify risk factors for ulcers and amputations.
- Patients with evidence of sensory loss or prior ulceration or amputation should have their feet inspected at every visit.
- Obtain a prior history of ulceration, amputation, Charcot foot, angioplasty or vascular surgery, cigarette
  smoking, retinopathy, and renal disease and assess current symptoms of neuropathy (pain, burning,
  numbness) and vascular disease (leg fatigue, claudication).
- The examination should include inspection of the skin, assessment of foot deformities, neurological assessment (10-g monofilament testing with at least one other assessment: pinprick, temperature, vibration), and vascular assessment including pulses in the legs and feet.
- Patients with symptoms of claudication or decreased or absent pedal pulses should be referred for ankle-brachial index and for further vascular assessment as appropriate.
- A multidisciplinary approach is recommended for individuals with foot ulcers and high-risk feet (e.g., dialysis patients and those with Charcot foot or prior ulcers or amputation).
- Refer patients who smoke or who have histories of prior lower-extremity complications, loss of
  protective sensation, structural abnormalities, or peripheral arterial disease to foot care specialists for
  ongoing preventive care and lifelong surveillance.
- Provide general preventive foot self-care education to all patients with diabetes.
- The use of specialized therapeutic footwear is recommended for high-risk patients with diabetes including those with severe neuropathy, foot deformities, ulcers, callous formation, poor peripheral circulation, or history of amputation.
- Foot ulcers and amputation, which are consequences of diabetic neuropathy and/or peripheral arterial disease (PAD), are common and represent major causes of morbidity and mortality in people with diabetes.
- Early recognition and treatment of patients with diabetes and feet at risk for ulcers and amputations
  can delay or prevent adverse outcomes.

- The risk of ulcers or amputations is increased in people who have the following risk factors:
  - Poor glycemic control
  - Peripheral neuropathy with LOPS
  - Cigarette smoking
  - Foot deformities
  - Preulcerative callus or corn
  - o PAD
  - History of foot ulcer
  - Amputation
  - Visual impairment
  - CKD (especially patients on dialysis)

Moreover, there is sufficient good-quality evidence to support use of appropriate therapeutic footwear with demonstrated pressure relief that is worn by the patient to prevent plantar foot ulcer recurrence or worsening. However, there is very little evidence for the use of interventions to prevent a first foot ulcer or heal ischemic, infected, nonplantar, or proximal foot ulcers. Studies on specific types of footwear demonstrated that shape and barefoot plantar pressure–based orthoses were more effective in reducing submetatarsal head plantar ulcer recurrence than current standard-of-care orthoses.

Clinicians are encouraged to review ADA screening recommendations for further details and practical descriptions of how to perform components of the comprehensive foot examination.

## RECOMMENDED RECORDS

- > History and physical
- > Focused foot exam including pulses, skin exam, ulceration exam, fungal exam, and sensation/neuropathy rule out
- Imaging as indicated including x ray, CT and MRI
- Education re glycemic control

## **CITATION**

- 1. American Diabetes Association Microvascular Complications and Foot Care: Standards of Medical Care in Diabetes -2020.
- 2. Diabetes Care. 2020;43(Suppl 1):S135.
- 3. L.A. Care Health Plan, Medical Management Technical Bulletin, 2<sup>nd</sup>, 3<sup>rd</sup> quarter 2011