Focus on
Skin Ulcers

Quick Facts

- Prevalence of chronic diseases that affect skin integrity such as diabetes and peripheral vascular disease are increasing due to the aging of baby boomers and obesity.[1]
- There are three types of ulcers: pressure ulcers, neuropathic ulcers and vascular ulcers which may be arterial and/or venous.[1]
- Skin breakdown with ulcer and chronic wound formation is a frequent consequence of these diseases.[1]
- It is estimated that 1.3 million to 3 million adults have a pressure ulcer, with an estimated cost of up to $40,000 to heal each ulcer depending on severity.[2]
- Prevention of diabetic neuropathic foot ulcers is key to preventing amputation; 60% of nontraumatic lower-limb amputations are diabetes-related; 85% of these lower extremity amputations are preceded by a foot ulcer.[3]
- Patients with loss of protective sensation have been shown to have a 15-fold increase in the risk of developing a foot ulcer.[4]

Ulcer Prevention: The Ankle Brachial Index (ABI) and Diabetic Foot Exam

- The presence of diabetes, neuropathy, peripheral vascular disease and bony deformities increase the risk of foot ulcers.[1] Screening for, diagnosing and treating risk factors for ulcers is essential to prevention.
- An ABI should be performed on individuals age 50-64 years of age with a history of smoking or diabetes; all patients age 65 and older; patients with leg pain on exertion or ischemic rest pain, abnormal lower extremity pulses and patients with known atherosclerotic coronary, carotid or renal artery disease.[5]
- All diabetics should receive a comprehensive annual foot exam with a 10g monofilament. People with one or more high-risk foot conditions should have a visual inspection of their feet at every clinic visit.[6]

Documentation Tips and Coding Highlights[7]

- When documenting ulcers, it is important **not** to document them as "wounds," "open wounds" or "lesions."
- Synonymous terms for a pressure ulcer may include decubitus ulcer, bed sore or plaster ulcer. Be sure to document the **site** and **stage** of the pressure ulcer.
  - Codes **707.00-707.07, 707.09** identify the **site** of the pressure ulcer.
  - Codes **707.20-707.25** identify the **stage** of the pressure ulcer.
- Document the type of ulcer and the etiology. Example: Ulcer of the lower leg due to diabetic PVD
  - **250.70** Diabetes with peripheral circulatory disorders
  - **443.81** *Peripheral angiopathy in diseases classified elsewhere*
  - **707.10** Ulcer of lower limb, unspecified
- Other ulcer (chronic, neurogenic, trophic) codes include:
  - **707.11-707.15, 707.19** identifies ulcer of lower limb, *except* pressure ulcer
  - **707.8** Chronic ulcer of other specified sites
  - **707.9** Chronic ulcer of unspecified site
- No documentation of staging is needed for non-decubitus ulcers.
- Venous (stasis) and arterial ulcer codes include:
  - 454.0 Varicose veins of lower extremities, any part, with ulcer
  - 454.2 Varicose veins of lower extremities, any part, with ulcer and inflammation
  - **440.23** Atherosclerosis of native arteries of the extremities with ulceration*
  - **440.24** Atherosclerosis of native arteries of the extremities with gangrene*

*If ulceration, specify the location and code also **707.10-707.9**.

Treatment of Ulcers and Co-morbid Conditions

Neuropathic Ulcers - Neuropathy is most often associated with diabetes. Control diabetes with a HgA1c <7 to help prevent progression of neuropathy.[6]

Venous Ulcers - Lower extremity ulcers in the presence of an ABI between 0.8 and 1.0 are considered to be venous ulcers. (Ulcers in the presence of an ABI between 0.5 and 0.8 are considered to be of mixed etiology.) An ABI of 0.5 or greater is required to initiate therapy. Compression therapy with medicated bandages (i.e., Unna Boot) are crucial to the treatment of these ulcers, in addition to leg elevation at rest and a supervised walking regimen.

Arterial Ulcers - Arterial ulcers are treated by optimization or restoration of adequate perfusion. Risk factor modification includes smoking cessation, controlling diabetes, hypertension and hyperlipidemia. A daily walking program is recommended. Leg elevation is relatively contraindicated in patients with arterial ulcers. Medication and surgical treatment may also be used.[1]

Pressure Ulcers - Elderly and institutionalized patients with pressure ulcers often have nutritional deficiency and chronic illnesses. Treatment requires a multidisciplinary team effort and often includes evaluation of patient positioning, special cushions and mattresses, nutritional support, advanced wound care and moisturizing skin. Other modalities are being used for treatment of non-healing foot ulcers including negative pressure wound therapy.[1,2]

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4. Mulder GD. Management of the diabetic foot ulcer in the elderly population. *Clin Geriatrics.* 2003;11:46–53.
5. "2011 ACCF/AHA Focused Update of the Guideline for the Management of Patients With Peripheral Artery Disease (Updating the 2005 Guideline): A Report of the American College of Cardiology Foundation/ American Heart Association Task Force on Practice Guidelines -- Society for Cardiovascular Angiography and Interventions, Society of Interventional Radiology, Society for Vascular Medicine, and Society for Vascular Surgery Et Al., 10.1016/j.jacc.2011.08.023." Journal of the American College of Cardiology. American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. Web. <http://content.onlinejacc.org/cgi/content/full/j.jacc.2011.08.023v1>. J Am Coll Cardiol 2011 0: j.jacc.2011.08.023.
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