

A guide to diabetic foot ulcers

View: Diabetic foot exam



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This chart explains the differences among

ischemic, neuropathic, and neuroischemic diabetic foot ulcers, making it easier for you to select the best treatment for your patient. ■

Differentiating diabetic foot ulcers

Ischemic ulcers



Anatomic location

- Between toes or tips of toes
- Over phalangeal heads
- Borders or dorsal aspect of feet



Wound characteristics

- Deep, pale wound bed
- Even wound margins
- Gangrene or necrosis
- Redness at borders of ulcer
- Blanched or purpuric periwound tissue
- Severe pain
- Cellulitis
- Minimal exudate



Associated findings

- Thin, shiny, dry skin
- Absent or diminished pulses
- TBPI < 0.7 mm Hg
- TcPO₂ < 30 mmHg
- Skin cool to touch, pale, or mottled
- No findings of peripheral neuropathy
- Hair loss on ankle and foot
- Thick dystrophic toenails
- Pallor on elevation; dependent rubor
- Cyanosis

Neuropathic ulcers



- Plantar metatarsal heads
- Plantar heel
- Over plantar bony prominences and deformities
- Areas subjected to weight bearing on plantar surface
- Areas subjected to stress (eg, dorsal portion of hammer toes)

- Red base, with healthy granular appearance
- Even wound margins
- Callus formation at borders of ulcer
- Painless, unless complicated by infection
- Rounded or oblong shape over bony prominence
- Variable exudate

- Dry skin
- Bounding pulses
- TBPI ≥ 0.7 mm Hg
- TcPO₂ > 30 mm Hg
- Warm foot
- Evidence of peripheral neuropathy
- Atrophy of small muscles of feet
- Distended dorsal foot veins
- Cyanosis

Neuroischemic ulcers



- Margins of foot, especially on medial surface of first metatarsophalangeal joint
- Over lateral aspect of fifth metatarsophalangeal joint
- Tips of toes; beneath toenails

- Pale pink or yellow wound bed
- Even wound margins
- Rounded or oblong shape over bony prominence
- Callus; may or may not be present
- Painless, owing to neuropathy
- Minimal exudate

- Thin, shiny, dry skin
- Absent or diminished pulses
- TBPI < 0.7 mm Hg
- TcPO₂ < 30 mm Hg
- Skin cool to touch, pale, or mottled
- Evidence of peripheral neuropathy
- Hair loss on ankle and foot
- Thick dystrophic toenails
- Pallor on elevation; dependent rubor



Source: Wound Care Education Institute. TBPI = toe brachial pressure index; TcPO₂ = transcutaneous oxygen pressure.