

Appendix 4 - Neuropathic and Ischaemic Foot Ulcers

Neuropathic ulcers are usually associated with trauma from excess pressure from footwear, deformity, heavy callus formation (with or without maceration) and gait. The treatment of neuropathic ulcers requires the off-loading of pressure, debridement of callus, prevention and/ or control of infection and specialist footwear to accommodate insoles and foot deformity. The treatment for ischaemic ulcers should involve vascular intervention where appropriate, off-loading when needed, specialist footwear, very judicious debridement and prevention and/ or control of infection.

The differences between neuropathic and ischaemic ulcers:

SIGNS AND SYMPTOMS	NEUROPATHIC	ISCHAEMIC
Appearance	Commonly found on pressure points on the toes and plantar surface. Often irregular with heavy callus around ulcer site with sloping edges, can be sloughy	Punched- out, undercutting, sloughy surrounded by thin glassy callus and devitalised tissue.
Deformity	Clawed toes, Charcot foot, high arch.	No deformity
Pain	Painless	Agony
Skin temperature	Warm	Cool
Colour	Normal	Pale, cyanotic or rubor
Tests	Insensitive/ diminished response to 10mg monofilament. Neurotip, temperature discrimination and reduced or absent reflexes	Doppler assessment for wave formation. ABPI/ TBPI for vascular status
Pulses	Palpable	Not palpable or weak
Callus formation	Commonly found on pressure weight bearing areas, can be heavy with maceration present	Commonly found on the pressure points, bony prominences of the toes and borders of the feet
Ulcer sites	Usually associated with high pressure points on the toes and plantar surfaces	Commonly found on the pressure points, bony prominences of the toes and feet

Early referral to the Podiatry Foot Protection Service (FPS) at Cantley Health Centre will help to ensure optimum patient outcomes. The Podiatry FPS will:

- Assess and determine the underlying causative factors
- Debride where appropriate
- Arrange X-Rays/ swabs
- Prevention and/or control of infection
- Pressure relief
- Education

The FPS will also refer to other specialist services when appropriate:

- TVAL- for those patients with primary cause: venous, lymphoedema or pressure wounds.
- Multi-disciplinary management for patients with complex needs requiring a joint approach- often they have a history of amputation, static/ deteriorating ulceration, poor glycaemic control, vascular insufficiency and foot deformity (including Charcot).
- Vascular Consultants- for those patients whose primary cause is peripheral arterial disease/ severe venous disease.
- Glycaemic control- refer to appropriate service to improve glycaemic control (GP, specialist diabetes nurse, Endocrinology consultant).
- Foot deformity suitable for elective foot surgery- Podiatry Surgery consultants.

