

Arterial Leg Ulcer Flow Chart

Assessment

History

- Medical
- Medications
- Wound
- Psychosocial / activities of daily living

Characteristics of the wound (see table below)

Diagnostic investigations

All patients with a leg ulcer should be screened for arterial disease, including an Ankle Brachial Pressure Index (ABPI)

* Assessment should only be undertaken by a trained health professional

Wound Bed Management

- Cleanse the wound gently with warm water or normal saline. Pat dry.
- In general, debride necrotic or devitalised tissue: *however*, do not debride dry gangrene or eschar
 - * Debridement should be undertaken only by a trained health professional
- Maintain a moist wound environment, *however*, if dry gangrene or eschar is present, it is best left dry
- Topical antimicrobial dressings may be beneficial when wounds are chronically or heavily colonised

Management

- Promote oxygenation through avoidance of:
 - smoking
 - dehydration
 - cold
 - stress and pain
- Refer to vascular surgeon for restoration of blood flow by revascularisation, if appropriate
- Ensure optimal pain management strategies

Prevention

- Reduce risk factors:
 - cease smoking
 - control diabetes mellitus
 - control elevated lipids
 - control hypertension
 - anti-platelet therapy
 - control weight
- Refer to vascular surgeon for assessment if appropriate
- Exercise the lower limbs
- Protect legs and feet:
 - ensure soft, conforming, proper fitting shoes
 - refer to podiatrist for general footcare, orthotics and offloading as necessary
 - protect legs (e.g. padded equipment, long clothing)
 - use pressure relief devices e.g. high density foam or air cushion boots for those with limited mobility
- Keep the legs warm (e.g. socks, rugs)
- Eat a nutritious diet

Characteristics of an Arterial Leg Ulcer



Arterial leg ulcers typically:

- Occur on the anterior shin, ankle bones, heels or toes
- Have pain which is relieved when legs are lowered below the level of the heart
- Have 'punched out' wound edges
- May have mummified or dry and black toes



The surrounding skin or tissue often has:

- Shiny or dry skin
- Devitalised soft tissue with dry or wet crust
- Thickened toe nails
- A purplish colour when the leg is lowered to the ground
- Loss of hair
- Cool skin

When to Refer

- uncertainty of diagnosis
- a low ABPI < 0.8 or a high ABPI > 1.2
- symptoms impact on quality of life
- multiple aetiology
- signs of infection
- ulcer appears ischaemic
- failure to heal

References:

Scottish Intercollegiate Guidelines Network, *Diagnosis and management of peripheral arterial disease*. 2006, Edinburgh: SIGN • Hopf H et al. Guidelines for the treatment of arterial insufficiency ulcers. *Wound Rep Regen*, 2006. 14(6):693-710 • National Clinical Guideline Centre, *Lower limb peripheral arterial disease. Diagnosis and management*. NICE Clinical Guideline 147, 2012: London • Hopf H et al. Guidelines for prevention of lower extremity arterial ulcers. *Wound Rep Regen*, 2008. 16(2):175-188 • RNAO, *Assessment and management of foot ulcers for people with diabetes*. 2005



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