Arterial Leg Ulcer Flow Chart

Assessment

History

- medical
- wound
- medications
- psychosocial/activities of daily living

Characteristics of the wound

Diagnostic investigations

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

Assessment should only be undertaken by a trained health practitioner

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 show signs of infection

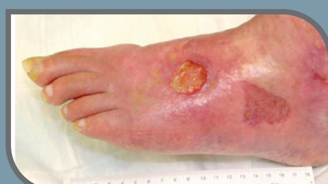
Management

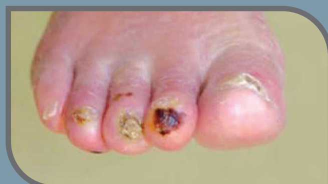
- Refer to vascular surgeon for restoration of blood flow by revascularisation, if appropriate
- Ensure optimal pain management strategies
- Intermittent pneumatic leg compression or hyperbaric oxygen therapy may help healing as adjunct treatments
- Educate patients on wound management and aetiology

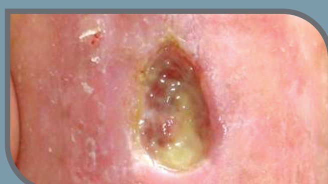
Prevention

- Reduce risk factors:
  - cease smoking
  - control blood glucose levels
  - control elevated lipids
  - control hypertension
  - 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, orthodics and offloading as necessary
  - protect legs (e.g. padded equipment, long clothing)
  - use pressure relief devices e.g. 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 with loss of hair
- devitalised soft tissue with dry or wet crust
- thickened toe nails
- a purplish colour when the leg is lowered to the ground
- atrophied skin or purpura
- cool skin

When to refer

- ABPI <0.5, or ABPI >1.3, or toe pressure <30mHg
- symptoms of acute limb ischaemia
- multiple aetiologies
- signs of infection or gangrene
- ulcer appears ischaemic
- no progress in healing in two to four weeks
- unrelieved pain

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