This is a guide only and does not replace clinical judgment

References:
National Clinical Guideline Centre, Lower limb peripheral arterial disease, Diagnosis and management. NICE Clinical Guidelines, 2012; 147. www.nice.org.uk/guidance

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Arterial Leg Ulcers

Assessment

- Screen all clients for arterial disease, including clinical assessment, pedal pulses, Ankle Brachial Pressure Index (ABPI) or toe pressures
- Assessment of leg ulcers and ABPI should only be undertaken by trained practitioners
- An ABPI <0.8 is indicative of arterial disease and an ABPI >1.3 requires investigation
- Other signs of peripheral vascular disease:
  - loss of hair, shiny, dry or cool skin
  - thin or atrophied skin
  - purpura
  - devitalised soft tissue with dry or wet crust
  - thickened toe nails
  - purple colour of limb in dependent position
- Refer to a specialist when there is:
  - a complex wound e.g. multiple aetiology
  - a low or high ABPI, or toe pressure <30mmHg
  - symptoms of acute limb ischaemia, and/or gangrene
  - unrelieved pain, signs of infection, or no progress in healing within two to four weeks

Management

- Revascularisation is the method most likely to heal and prevent arterial leg ulcers, if surgery is appropriate for the client
- Dressings should be low adherent and maintain a moist environment, however, dry gangrene or eschar is best left dry until revascularisation
- If dry gangrene or eschar is present, do not debride until re-establishment of arterial flow
- Debridement should only be undertaken by health professionals with expertise in the area
- Treat with topical antimicrobial dressings if wounds show signs of infection
- Intermittent pneumatic leg compression may improve healing as an adjunct treatment
- Hyperbaric oxygen therapy may help as an adjunct treatment for hypoxic ulcers
- Educate clients on wound care and aetiology

Arterial leg ulcers typically:

- occur over toes or bony prominences
- are pale grey or yellow in colour
- have a ‘punched out’ appearance
- have minimal exudate
- are very painful, particularly when legs are elevated

Prevention

- Reduce risk factors:
  - cease smoking
  - optimise blood glucose levels
  - control lipid levels and hypertension
  - control weight
- Exercise lower limbs to increase arterial flow
- Protect lower extremities, including:
  - soft, conforming, well fitting shoes, orthotics and pressure off-loading as needed
  - leg protection to avoid injury
  - protection of digits and heels
  - use of effective pressure relieving devices
  - take extreme care when cutting nails, preferably undertaken by a podiatrist
- Passive warming of legs improves perfusion and may prevent arterial ulcers (e.g. warm socks, rugs, environment)
- Address psychosocial concerns with a multi-disciplinary care team