

This is a guide only and does not replace clinical judgment

#### **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 Repair and Regeneration*, 2006. 14(6):693-710 National Clinical Guideline Centre. *Lower limb peripheral arterial disease*. 2012, London: NICE

Hopf H et al. Guidelines for prevention of lower extremity arterial ulcers. *Wound Repair and Regeneration*, 2008. 16(2):175-188

RNAO. Assessment and management of foot ulcers for people with diabetes. 2005, Ontario: RNAO





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## **Arterial Leg Ulcers**

Information for health professionals

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# **Arterial Leg Ulcers**

#### Assessment

- All clients should be screened for arterial disease, including pedal pulses and Ankle Brachial Pressure Index (ABPI)
- Assessment of leg ulcers and ABPI should only be undertaken by trained practitioners
- An ABPI <0.9 is indicative of arterial disease and an ABPI >1.2 requires investigation
- Other signs of peripheral vascular disease:
- loss of hair, shiny, dry or cool skin
- mummified or black toes
- 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:
- uncertainty in diagnosis or abnormal ABPI
- symptoms limit lifestyle and quality of life
- signs of infection, deterioration or ischaemia





#### Management

- Revascularisation is the method most likely to heal and prevent arterial leg ulcers, if surgery is appropriate for the client
- Promote oxygenation of wound environment avoid cold, dehydration, stress and pain
- Dressings should 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 be undertaken by health professionals with training or expertise
- Topical antimicrobial dressings may help if wounds are chronically or heavily colonised
- Hyperbaric oxygen therapy may be helpful for clients unable to be revascularised and whose ulcer is not healing
- Lifestyle modifications, education and medications as necessary are important

### 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
- anti-platelet therapy
- control weight
- Exercise lower limbs to increase arterial flow



- 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







