

Venous Leg Ulcer Flow Chart

Assessment

Take a comprehensive assessment of:

- the individual and their history
- leg ulcer area and characteristics
- the healing environment

Diagnostic investigations:

- screen all patients with a leg ulcer for arterial disease, including Ankle Brachial Pressure Index (ABPI)*
- reassess the ABPI every three–12 months according to the individual's condition

* Compression therapy is contraindicated if the ABPI is <0.8 or >1.2

Assessment should be undertaken by a health professional with training and expertise in leg ulcer management

Wound Bed Management

- Cleanse with a neutral, non-irritating solution, e.g. warm tap water or saline
- Clean the wound gently (avoid mechanical trauma)
- Remove necrotic or devitalised tissue (e.g. autolytic debridement)*
- EMLA® cream can reduce pain associated with debridement
- * Mechanical or sharp debridement should only be done by appropriately trained practitioners
- Select a dressing that will:
 - maintain a moist wound-healing environment
 - manage wound exudate
 - be low-adherent
 - protect the peri-ulcer skin

Management

- Refer for vascular assessment for venous intervention
- Multilayered compression therapy should be applied where there are no contraindications*
 - * Contraindications include low or high ABPI, mixed ulcer aetiology, heart disease, peripheral neuropathy
 - Compression therapy should only be applied by a trained health professional
- Apply moisturiser to the lower limb
- Apply padding over bony prominences
- Apply compression from toe-to-knee
- Apply compression system as per manufacturers' guidelines
- Remove bandaging if there is:
 - slippage of bandage
 - decreased sensation of lower limb
 - toes go blue or purple, or leg swells above or below the bandage
 - increased pain, or pins and needles
 - shortness of breath or difficulty breathing
- Monitor progress by measuring the wound before starting compression therapy, then every two–four weeks, or when changes occur



Prevention

- Use of compression stockings for life reduces leg ulcer recurrence (class three if tolerated, or highest level tolerated)
- Consider practicality and application methods when choosing the type
 - A trained practitioner should fit compression stockings
- Replace compression stockings every six months
- Provide education to clients and carers on compression stocking application and removal techniques
- Refer to vascular surgeon
- Monitor regularly, at three, six or 12 months, depending on individual's need and risk of recurrence
- Encourage daily skin care
- Elevate the affected limb above heart level daily
- Encourage ankle and calf muscle exercises
- Repeat Doppler ABPI every three–12 months according to the individual's condition

Characteristics of a venous leg ulcer



Venous leg ulcers typically:

- occur on the lower third of the leg
- have pain usually relieved by elevation of the legs above heart level
- are shallow and have irregular, sloping wound margins
- produce moderate to heavy exudate

The surrounding skin often has:

- haemosiderin staining
- atrophie blanche
- hyperkeratosis (dry, flaky skin)
- venous stasis eczema
- inverted champagne bottle leg appearance

When to refer

Uncertainty in diagnosis

Complex ulcers (multiple aetiology)

ABPI <0.8 or >1.2

Signs of spreading or systemic infection

Deterioration of ulcer

Failure to reduce in size by 20–30% in four to six weeks, or to improve after three months, or recurring ulceration

Uncontrolled pain

References:

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