Compression therapy (CT) remains underutilised, despite guidelines stating that compression is key to healing active ulceration. The aim of CT is to reduce oedema and assist venous return from the lower limb by application of external pressure.

**INDICATIONS**
- VLU with ABPI 0.8 or above
- Acute vein thrombosis
- Superficial thrombophlebitis
- Varicose veins

**CONTRAINDICATIONS**
- Severe arteriopathy obliterans (AO)
- Uncompensated congestive heart failure

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**BANDAGES**
- Choose a system which best suits the patient’s specific needs
- Aim for a pressure level of 40mmHg at the ankle and 30mmHg at the calf
- Define the degree of elasticity (short, long) and compression (low, mild, strong)

**OVERLYING BANDAGES: USE TO INCREASE THE FINAL PRESSURE LEVEL AS REQUIRED**
- Use protective and filling material (foam, dressings, cotton, tubular jersey)
- Start rolling at the base of the toes
- Apply the bandage upwards, overlapping 50%
- End the application 5 cm below the knee fold
- Recommend wearing larger-sized shoes

**SELECTION OF CT**
- Some factors affecting use of CT
  - Experience of the healthcare practitioner applying compression
  - Wound status; pain level
  - Patient mobility and dexterity
  - Access to care
  - Local availability of CT resources

**REFERENCES**

### OPTIMISING LEG ULCER WOUND MANAGEMENT

**CLASSIFY TYPE OF LEG ULCER VIA HOLISTIC ASSESSMENT AND ESTABLISH UNDERLYING CAUSES**

<table>
<thead>
<tr>
<th><strong>VENOUS LEG ULCER</strong></th>
<th><strong>ARTERIAL LEG ULCER</strong></th>
<th><strong>MIXED AETIOLOGY LEG ULCER</strong></th>
<th><strong>INFECTED LEG ULCER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>40–85% of vascular leg ulcers</td>
<td>Arterial: 5–30%</td>
<td>Mixed: 10–20%</td>
<td>Arterial, mixed or venous origin</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

<table>
<thead>
<tr>
<th><strong>AETIOLOGY</strong></th>
<th></th>
<th></th>
<th>Arterial, mixed or venous origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic venous insufficiency (CVI)</td>
<td>Arteriosclerosis (chronic arterial obstruction)</td>
<td>Mixed aetiology, with predominance of venous or arterial origin.</td>
<td></td>
</tr>
<tr>
<td>Deep venous thrombosis (DVT)</td>
<td>Arterial thrombosis/embolism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary venous hypertension – secondary to CVI or DVT</td>
<td>Hypertension (Martorell’s ulcer)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LOCATION**

<table>
<thead>
<tr>
<th>Medial side of the lower leg, often internal malleolus</th>
<th>Between the ankle and the foot</th>
<th>Lower leg</th>
</tr>
</thead>
</table>

**MAIN CHARACTERISTICS**

<table>
<thead>
<tr>
<th>High exudate levels</th>
<th>Painful</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular sloping margins</td>
<td>Small and deep</td>
<td></td>
</tr>
<tr>
<td>Usually shallow</td>
<td>Necrotic wound base</td>
<td></td>
</tr>
<tr>
<td>Fibrinous, granulating base</td>
<td>Dry to low exudate levels</td>
<td></td>
</tr>
<tr>
<td>Single, multiple or even circular</td>
<td>Pale skin, cramps, hair loss, skin and nail atrophy</td>
<td></td>
</tr>
<tr>
<td>May be painful</td>
<td>Decreased or absent peripheral pulses</td>
<td></td>
</tr>
<tr>
<td>Oedema, redness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of dermatological periwound signs: ochre dermatitis, white atrophy, hypopigmented plaques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lipodermatosclerosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal peripheral pulses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LOCAL TREATMENT GOALS**

<table>
<thead>
<tr>
<th>EXUDATE MANAGEMENT</th>
<th></th>
<th></th>
<th>REDUCTION OF BACTERIAL LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain optimal moist environment</td>
<td>Consider necessity of debridement: promote healthy granulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect periwound skin</td>
<td>Pain management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease tissue oedema</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LOCAL TREATMENT**

**WOUND BED PREPARATION**

- Use wound cleansing solution (e.g. Prontosan® Wound Irrigation Solution or Prontosan® Wound Gel X)
- Use absorbent/low-adherent moist dressing (e.g. Askina® DresSil)
- According to the level of exudate:
  - Alginate dressing (e.g. Askina® Sorb)
  - Absorbent/low-adherent moist dressing (e.g. Askina® Foam/DresSil)

**DRESSING**

- Absorbent/low-adherent moist dressing (e.g. Askina® DresSil)
- Not to be used

**COMPRESSION THERAPY**

- Compression bandages (e.g. Askina® Forte/2-Layer System)
- Not to be used

**ANTIBACTERIAL DRESSING**

- (e.g. Askina® Calgitrol® Ag/Paste)
- Depend on ABPI measurement

**CLINICAL SIGNS OF INFECTION**

- Cellulitis
- Delayed healing
- Increase in local skin temperature
- Increased pain
- Wound bed extension within inflamed margins