New Guideline in venous ulcer treatment: dressing, medication, intervention

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Topic

• Overview venous ulcer treatment

• Guidelines
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CEAP system characterize Chronic venous disease (CVD)

C: clinical

0  No disease
1  Telangiectasia
2  Varicose vein
3  Edema without skin change
4  4a hyperpigmentation
   4b lipodermatosclerosis
5  Healed ulcer
6  Active ulcer
Ulcer
Treatment of Chronic venous ulcer (CVU)
Aim

to achieve wound healing and then to prevent recurrence

Method

1. Reduce venous hypertension
2. Local treatment of ulcer
3. Measure to improve muscle pump
4. Adjuvant treatment
1. Reduce venous hypertension
1.1 Compression
40-60 mmHg

Mechanism

• Compression reduce reflux in SV, DV and PV
• Increase interstitial pressure, and promoting resorption of interstitial edema, consequently improve oxygenation in the tissue
4-layer bandages
4-layer bandages
Pressure measurement is dynamic
Intermittent pneumatic compression
1.2 correction of SV incompetence

- Venous stripping (VS)
Endovenous ablation of GSV have gained popularity.

- Radiofrequency ablation (RFA)

- Foam sclerotherapy (ultrasound guided foam sclerotherapy-UGFS)

- Laser (endovenous laser ablation-EVLA)

These performed as outpatient base procedures using tumescent local anesthesia.
Radiofrequency

1. Disposable catheter inserted into vein
2. Vein heats and collapses
3. Catheter withdrawn, closing vein
Correction incompetent DV, PV

- DV: Correction of obstruction, Deep vein surgery: rare option e.g. valvuloplasty, deep vein translocation

- PV: ablation perforating vein: endovenous RF-laser, SEPS, open surgery
2. Local treatment of ulcer

Aim

• Clean fibrin and necrotic tissue
• Prevent bacterial multiplication and infection
• Stimulate granulation of the wound
• Promote epithelialisation
3. Improvement of the effectiveness of muscle pump

Muscle pump failure due to

- Sedentary lifestyle
- Striated muscle atrophy
- Ankle joint ankylosis
- Adverse change of muscle aponeurosis

Treatment: physiotherapy, gymnastics, biomechanical stimulation
4. Adjuvant treatment

- Treatment concomitant disease
- Hygiene and lifestyle
- Nutrition
- Edema
- Arterial insufficiency
- Venoactive drug
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Union of International Phlebology

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In a patient with a venous leg ulcer (C6) and incompetent superficial veins that have axial reflux directed to the bed of the ulcer, we recommend surgery [GRADE -1; LEVEL OF EVIDENCE-B] or an alternative ablation technique [GRADE -2; LEVEL OF EVIDENCE –C] of the incompetent veins in addition to standard compressive therapy to prevent recurrence.
In a patient with an healed venous leg ulcer (C6) and incompetent superficial veins that have axial reflux directed to the healed ulcer area, we recommend surgery [GRADE -1; LEVEL OF EVIDENCE –B] or an alternative ablation technique [GRADE -2; LEVEL OF EVIDENCE –C] of the incompetent veins in addition to standard compressive therapy to prevent recurrence.
In a patient with a venous leg ulcer (C6) and incompetent superficial veins that have axial reflux directed to the bed of the ulcer, we recommend surgery [GRADE -1; LEVEL OF EVIDENCE-B] or an alternative ablation technique [GRADE -2; LEVEL OF EVIDENCE –C] of the incompetent veins in addition to standard compressive therapy to prevent recurrence.
In a patient with an healed venous leg ulcer (C5) and incompetent superficial veins that have axial reflux directed to the healed ulcer area, we recommend surgery [GRADE -1; LEVEL OF EVIDENCE –B] or an alternative ablation technique [GRADE -2; LEVEL OF EVIDENCE –C] of the incompetent veins in addition to standard compressive therapy to prevent recurrence.
Venous ulcer

Compression therapy (Bandage)
Together with wound care

Prevent recurrence
Identify source of reflux
SV: venous stripping, RFA, laser
PV: surgery, SEPS, laser, RFA
DV: obstruction: dilate venoplasty
valvuloplasty, valve transplantation
• Check patient status

• Clean wound

• Compression therapy (stocking)

• Think of adjuvant treatment