

MANAGEMENT OF LEG ULCERS IN PRACTICE

A

Assessment and diagnosis

- Assessment of the patient: establish aetiology with ABPI measurements and evaluate the patient's suitability for compression therapy
- Assessment of the wound using TIME framework¹: Tissue management, Inflammation and Infection control, Moisture balance, Epithelial (Edge) advancement)

B

Best practice wound and skin management

- Cleansing and skin preparation
- Debridement if necessary
- Periwound and surrounding skin management
- Wound dressing choice: exudate level management, application under compression

C

Compression therapy for active treatment and wound prevention

- Compression therapy is the cornerstone of VLU management and improves healing and prevents recurrences

REGULAR ASSESSMENT AND PATIENT/CAREGIVER EDUCATION

- Compression therapy (CT) remains underutilised, despite guidelines stating that compression is key to healing active ulceration²
- 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

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

BANDAGES

- Choose a system which best suits the patient's specific needs
- Aim for a pressure level of 40mmHg at the ankle and 30 mmHg 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

HINTS AND TIPS

- 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

References

1. Dowsett C, Newton H (2004) Wound bed preparation: TIME in practice. *Wounds UK* 1(3): 48-70
2. Harding K et al (2015) Simplifying venous leg ulcer management: consensus recommendations. *Wounds International*. Available at <http://bit.ly/1r1uMdy> (accessed 31.03.2016)
3. Martson W (2011) Mixed arterial and venous ulcers. *Wounds* 23(12): 351-6

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OPTIMISING LEG ULCER WOUND MANAGEMENT

Classify type of leg ulcer via holistic assessment and establish underlying causes²

DESCRIPTION

Aetiology

Location

Main characteristics

LOCAL TREATMENT GOALS

Reassess if there is no improvement or delayed healing after 4-8 weeks of appropriate treatment

LOCAL TREATMENT

Wound bed preparation

Dressing

Compression therapy

VENOUS LEG ULCER

40-85% of vascular leg ulcers



Chronic venous insufficiency (CVI)
Deep venous thrombosis (DVT)
Secondary venous hypertension – secondary to CVI or DVT

Medial side of the lower leg, often internal malleolus

High exudate levels
Irregular sloping margins
Usually shallow
Fibrinous, granulating base
Single, multiple or even circular
May be painful
Oedema, redness
Presence of dermatological periwound signs: ochre dermatitis, white atrophy, hypopigmented plaques
Lipodermatosclerosis
Normal peripheral pulses

Exudate management: maintain optimal moist environment
Protect periwound skin
Decrease tissue oedema

ARTERIAL LEG ULCER

Arterial: 5-30%



Arteriosclerosis (chronic arterial obstruction)
Arterial thrombosis/embolism
Hypertension (Martorell's ulcer)

Between the ankle and the foot

Punched out, sharply demarcated edges
Painful
Small and deep
Necrotic wound base
Dry to low exudate levels
Pale skin, cramps, hair loss, skin and nail atrophy
Decreased or absent peripheral pulses

Wound bed preparation; promote granulation (do not use autolytic debridement in ischaemic limbs/digits)
Pain management

MIXED AETIOLOGY LEG ULCER

Mixed: 10-20%



Mixed aetiology, with predominance of venous or arterial origin.

Lower leg

Mixture of signs and symptoms

Maintain optimal moist environment
Consider necessity of debridement: promote healthy granulation

INFECTED LEG ULCER



Arterial, mixed or venous origin

Depending on the origin

Clinical signs of infection:

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

Reduction of bacterial load
Exudate management

Use wound cleansing solution (e.g. Prontosan® Wound Irrigation Solution or Prontosan® Wound Gel X)

According to the level of exudate:
◆◆◆ Alginate dressing (e.g. Askina® Sorb)
◆◆ Absorbent/low-adherent moist dressing (e.g. Askina® Foam/DresSil)

Compression bandages (e.g. Askina® Forte/2-Layer System)

◆◆ Absorbent/low-adherent moist dressing (e.g. Askina® DresSil)

Not to be used

According to the level of exudate:
◆◆◆ Alginate dressing (e.g. Askina® Sorb)
◆◆ Absorbent/low-adherent moist dressing (e.g. Askina® Foam/DresSil)

Dependent on ABPI measurement

Antibacterial dressing: (e.g. Askina® Calgitrol® Ag/Paste)

Dependent on ABPI measurement