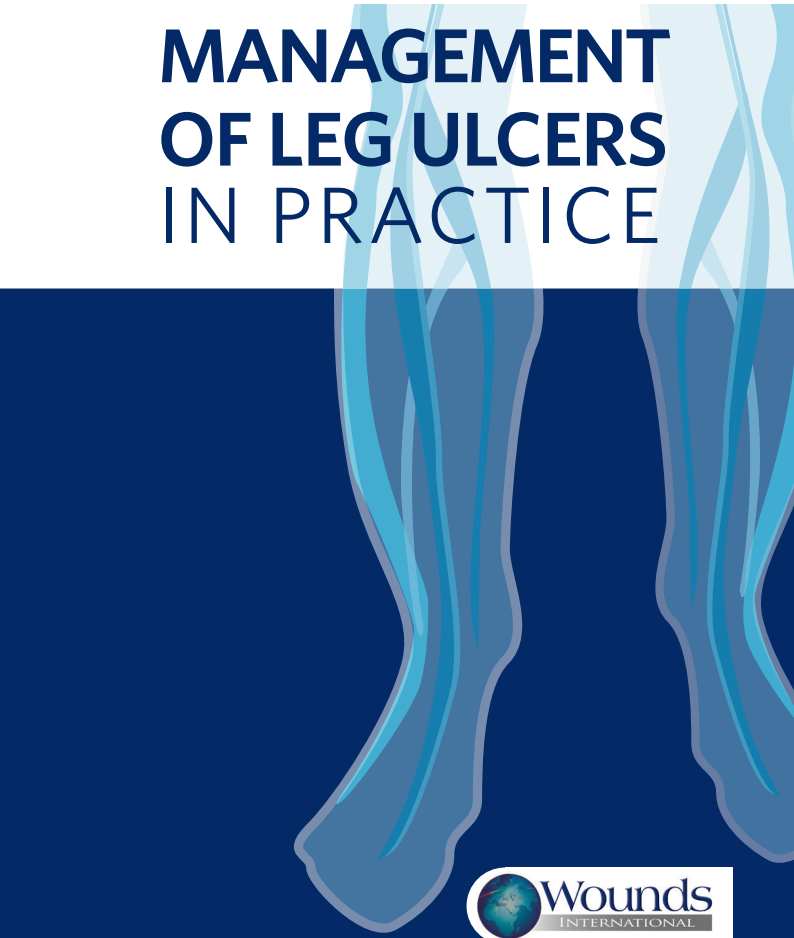
QUICK GUIDE

MANAGEMENT OF LEG ULCERS IN PRACTICE



Wounds INTERNATIONAL

OPTIMISING LEG ULCER WOUND MANAGEMENT

Classify type of leg ulcer via holistic assessment and establish underlying causes[2]

	VENOUS LEG ULCER 40–85% of vascular leg ulcers	ARTERIAL LEG ULCER Arterial: 5–30%	MIXED AETIOLOGY LEG ULCER Mixed: 10–20%	INFECTED LEG ULCER
				
DESCRIPTION				
Aetiology	Chronic venous insufficiency (CVI) Deep venous thrombosis (DVT) Secondary venous hypertension – secondary to CVI or DVT	Arteriosclerosis (chronic arterial obstruction) Arterial thrombosis/embolism Hypertension (Martorell's ulcer)	Mixed aetiology, with predominance of venous or arterial origin.	Arterial, mixed or venous origin
Location	Medial side of the lower leg, often internal malleolus	Between the ankle and the foot	Lower leg	Depending on the origin
Main characteristics	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	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	Mixture of signs and symptoms	Clinical signs of infection: • Cellulitis • Delayed healing • Increase in local skin temperature • Increased pain • Wound bed extension within inflamed margins
LOCAL TREATMENT GOALS Reassess if there is no improvement or delayed healing after 4–8 weeks of appropriate treatment	Exudate management: maintain optimal moist environment Protect periwound skin Decrease tissue oedema	Wound bed preparation; promote granulation (do not use autolytic debridement in ischaemic limbs/digits) Pain management	Maintain optimal moist environment Consider necessity of debridement: promote healthy granulation	Reduction of bacterial load Exudate management
LOCAL TREATMENT				
Wound bed preparation	Use wound cleansing solution (e.g. Prontosan® Wound Irrigation Solution or Prontosan® Wound Gel X)			
Dressing	According to the level of exudate: 💧💧💧Alginate dressing (e.g. Askina® Sorb) 💧💧 Absorbent/low-adherent moist dressing (e.g. Askina® Foam/DresSil)	💧💧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)	Antibacterial dressing: (e.g. Askina® Calgitrol® Ag/Paste)
Compression therapy	Compression bandages (e.g. Askina® Forte/2-Layer System)	Not to be used	Dependent on ABPI measurement	Dependent on ABPI measurement

CONSENSUS MODEL FOR LEG ULCER MANAGEMENT[2]

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 framework[1]: 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 FOR VLU MANAGEMENT[2,3]

- Compression therapy (CT) remains underutilised, despite guidelines stating that compression is key to healing active ulceration[2]
- 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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