Clinical Guidance for the Management and Treatment of Leg Ulcers

**Lead executive** | Chief Executive
--- | ---
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**Type of document** | Guidance
**Target audience** | All community staff
**Document purpose** | Clinical guidance for the management and treatment of leg ulcers

**Approving meeting** | Neighbourhood Based Care Governance Group Clinical Practice & Standards Sub-Committee (Chair’s Action)
**Implementation date** | 03-Apr-20

**CWP documents to be read in conjunction with**
- HR6 Mandatory Employee Learning (MEL) policy
- IC3 Standard Infection Control Precaution policy
- HS1 Waste Management policy
- IC2 Hand decontamination policy and procedure
- IC8 Policy for the procedure for Aseptic Non Touch Technique
- CP3 Health Records Policy
- Suspected Sepsis Pathway flowchart - Community

**Document change history**

| What is different? | In line with NHS Improvement RightCare (2017) - The variation between sub-optimal and optimal pathways, and Wounds UK Best Practice Statement (2019) Addressing complexities in the management of venous leg ulcers, Cheshire and Wirral Partnership NHS Foundation Trust adopted a Leg Ulcer Pathway to ensure equity of treatment and ensuring patients receive the correct care in a timely manner to optimise their healing. The Leg Ulcer Pathway has now been incorporated into this guidance.

| Appendices / electronic forms | No

| What is the impact of change? | Those using this policy will have clear guidance on how and when to treat patients with a lower leg wound.

| Training requirements | No - Training requirements for this policy are in accordance with the CWP Training Needs Analysis (TNA) with Education CWP.

**Document consultation**
- **Clinical Services** | Who within this service have you spoken to
- **Corporate services** | Who within this service have you spoken to
- **External agencies** | Who within this service have you spoken to
Financial resource implications | None

External references

9.

Equality Impact Assessment (EIA) - Initial assessment

<table>
<thead>
<tr>
<th>Does this document affect one group less or more favourably than another on the basis of:</th>
<th>Yes/No</th>
<th>Comments</th>
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<tr>
<td>- Race</td>
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<td>- Ethnic origins (including gypsies and travellers)</td>
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<td>- Nationality</td>
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<td>- Religion or belief</td>
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<td>- Sexual orientation including lesbian, gay and bisexual people</td>
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<td>- Age</td>
<td>No</td>
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<tr>
<td>- Disability - learning disabilities, physical disability, sensory impairment and mental health problems</td>
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Is there any evidence that some groups are affected differently? No

If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable? N/A

Is the impact of the document likely to be negative? Select
- If so can the impact be avoided? Select
- What alternatives are there to achieving the document without the impact? Select
- Can we reduce the impact by taking different action? Select

Where an adverse or negative impact on equality group(s) has been identified during the initial screening process a full EIA assessment should be conducted.

If you have identified a potential discriminatory impact of this procedural document, please refer it to the human resource department together with any suggestions as to the action required to avoid / reduce this impact. For advice in respect of answering the above questions, please contact the human resource department.

Was a full impact assessment required? No

What is the level of impact? Select
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Quick reference flowchart – Treatment of leg ulcers
For quick reference the guide below is a summary of actions required.

Patient presents with a lesion on lower limb

Lesion failed to progress at 2 – 4 weeks

Complete full holistic leg ulcer assessment

Lesion healed at 4 weeks

No further treatment required

Have the following been considered as possible cause of ulceration?

- **Suspected malignancy** – Refer urgently to dermatology.
- **Pyoderma gangrenosum** – Simple local wound care. Refer to dermatology.
- **Contact Dermatitis** – Discontinue allergen. Refer to dermatology for investigations.
- **Diabetic foot ulcer/neuropathic ulcer** – Refer to Diabetic foot clinic. Good local wound care.
- **Lymphoedema** – Refer to Lymphoedema service if patient is not known to them.

Follow the **Leg Ulcer Pathway** *(Appendix 1)* if the above conditions have been excluded.
1. **Introduction**

The purpose of this document is to outline best practice in relation to the assessment and management of leg ulceration. Any health professional that has completed the appropriate training and has been assessed as possessing the appropriate competencies can undertake and follow these guidelines.

All healthcare professionals must exercise their own professional judgement when using guidelines. However any decision to vary from the guideline should be documented in the patient records to include the reason for variance and the subsequent action taken.

2. **Definitions**

- A Venous leg ulcer is defined as an open lesion between the knee and the ankle joint that remains unhealed for at least four weeks and occurs in the presence of venous disease (Scottish Intercollegiate Guidelines Network (SIGN), 2010)
- Arterial leg ulcers – caused by poor blood circulation as a result of narrowed arteries due to atherosclerosis where a fatty deposit builds up inside the arteries
- Diabetic leg ulcers – caused by high blood sugars and are usually found on the foot.
- Malignant leg ulcers – a rare cause of ulceration – rolled edges and non-healing.
- Doppler – Assessment of the ankle brachial pressure (ABPI), which is used to diagnose venous ulceration.
- ABPI – Ankle Brachial Pressure Index

3. **Standards of practice/ indications for use**

Venous leg ulcers can be diagnosed on patient history and examination findings following Doppler studies to exclude arterial insufficiency.

Any person being managed by services provided by Cheshire and Wirral Partnership Foundation Trust who has an open area or skin breakdown to the lower leg, which has not shown signs of healing or healed within a period of 2 - 4 weeks, or a known history of venous disease will:

- Be offered a full leg ulcer assessment and examination of the ulcer at the earliest opportunity (ask about pain, odour and discharge)
- Clinical investigations are carried out including weight, blood pressure, urinalysis, mobility, nutritional status, past medical history and Doppler studies to exclude arterial insufficiency. The absence of pulses in the feet may indicate arterial insufficiency however palpitation alone is not sufficient to rule this out.
- Treatment options are discussed once a diagnosis has been made. Compression bandaging is the gold standard treatment for venous leg ulcers (National Institute for Health and Care Excellence, 2015).
- Benefits and risks of treatment are explained
- Care is regularly reviewed during treatment.

**Doppler Studies:**

- Doppler ultrasound is used to detect velocity and location of blood flow in both arteries and veins and is used to record a Resting Pressure Index (RPI) also known as Ankle Brachial Pressure Index (ABPI).
- Ankle brachial pressure index compares the traditional systolic reading with the ankle systolic reading and determines the arterial blood flow to the feet. These recordings are expressed as a ratio: It is an important element of the assessment process, but must not be judged independently. In conjunction with a holistic assessment the Doppler ultrasound can help to inform the differential diagnosis. It can be utilised to exclude arterial disease and identify those patients for whom
compression is suitable and those patients with impaired arterial flow who should be referred to the vascular surgeon for re-vascularisation (Wounds UK, 2019)

- Doppler ultrasound should be utilised as an aid to the differential diagnosis of leg ulceration, being of equal importance to performing a holistic assessment. The equation for determining the ABPI is

\[
\text{Ankle Brachial Pressure Index} = \frac{\text{Highest Ankle Systolic Pressure mmHg}}{\text{Highest Brachial Systolic Pressure mmHg}}
\]

**Doppler ultrasound should always be undertaken in conjunction with a holistic approach.**

The most commonly used Doppler Ultrasound is made by Huntleigh Diagnostics. They have a range of probe sizes, and the rule of thumb is “the lower the frequency the deeper the optimum range, the larger the transducer head.”

- 5MHz - Has the optimum range of 1-8 cm for deep vascular studies. 5MHz is ideal for deep vessels and oedematous limbs.
- 8MHz - Has an optimum range of 2mm-4cm and 8MHz is ideal for ABPI on average sized limbs.

To assess arterial and venous blood flow a frequency of 5-8 MHz is required.

There are alternative devices that can be used to determine the ABPI including the following:

- Microlife WatchBP machine – Microlife Health Management Ltd
- Dopplex Ability machine – Huntleigh Diagnostics

Ankle pressures should always be recorded before applying a regime of compression bandaging.

Failure to do this can lead to tissue necrosis and amputation.

High compression bandaging should never be used on patients with a pressure index of less than 0.8 unless directed by the vascular team.

N.B A.B.P.I. readings > 1.3 — 1.4 can suggest calcification of the arteries therefore compression bandaging should not be applied unless the person has been reviewed by the vascular team and written consent by the vascular team has been obtained.

**CAUTION**

Repeatedly inflating the cuff, or leaving the cuff inflated for prolonged periods can cause the ankle pressure reading to fall by producing a hyperaemic response.

If the pulse is irregular as in atrial fibrillation it may be difficult to measure the systolic pressure as it can vary markedly from beat to beat. If unsure at this point, refer to vascular services for an opinion.
Artificially high readings may be obtained in:

- diabetics due to calcification of medial lining of the artery which renders the vessel incompressible
- patients with renal disease
- patients with gross oedema

**Guideline for interpretation of the Doppler Ultrasound results**

**1.3 and above** May suggest arterial calcification. Refer to diabetic/vascular specialist following discussion with Tissue Viability.

**1 - 1.3** Normal arterial flow – safe for compression.

**0.9** Indicates a mild effect to arterial flow – safe for compression.

**0.8** Is the lowest level at which high compression can be safely applied.

**0.6 and below** Severe peripheral vascular disease requiring urgent referral if patient/carer is in agreement with referral.

Abnormal ABPI results should be rechecked with a hand-held Doppler machine, if an automated ABPI machine has previously been used. If the result remains abnormal, refer to the Vascular Service.

4. **Complexities and other conditions**

**Heart failure:**

If patients are presenting asymptomatic of heart failure and not in the acute stage, reduced or modified compression can be applied with caution, one leg at a time, following discussion with a heart failure consultant/specialist nurse. Where heart failure is uncontrolled, extreme caution is advised.

**Previous deep vein thrombosis (DVT):**

An ABPI can be performed on a patient who has a confirmed DVT or who is receiving DVT treatment, having had their first dose of anticoagulant therapy. Patients with multiple DVT should be referred for investigations.

**Autoimmune disorders:**

It is important to be aware that autoimmune disorders may prolong the inflammation phase of wound healing. In particular, people with rheumatoid arthritis may have multiple, small ulcers which may suggest vasculitis. This group may also be at higher risk of calciphylaxis. A multidisciplinary team approach to treating patients with autoimmune disorders is advised.

**Haematological disorders:**
Some cancer and sickle cell disease medications delay wound healing. In some cases, the dose can be reduced or stopped for a period of time to allow wound healing. This should only be done under the supervision and guidance of the oncology or haematology team.

**Patients at risk of self-harm or harm to others:**

It is important to be aware of the potential ligature risk posed by compression bandages, wraps and hosiery kits. Completing a risk assessment may suggest compression therapy is not suitable.

**Chronic pain:**

The nature and intensity of pain should be monitored and documented regularly. Patients who find compression painful require assessment of the type of compression used. Analgesics should be prescribed. For chronic pain, consider liaising with the pain team.

**People who inject drugs into the lower limb:**

People who have a history of injecting substances in the lower veins are at high risk of developing complications in the legs. For this patient group, prevention of leg ulceration is paramount. Unless there is significant risk of arterial disease, the majority of patients in this group should have high compression therapy of at least 40mmHg. Harm reduction and working closely with the MDT and key workers is vital.

5.  **Wound Dressings**

Wound dressings aid healing, improve comfort and control exudate and are needed to prevent a bandage or compression hosiery from adhering to the wound bed (SIGN, 2010). Their role is maintaining moisture, facilitating autolytic debridement and to promote healing.

6.  **Managing associated oedema**

In addition to compression bandaging or hosiery (if appropriate), advise the person to elevate their legs (above hip level) for 30 minutes, three to four times a day, and consider placing pillows under their feet and legs while sleeping (ensure patient floats heels if using this method). Prolonged periods of time with legs down (e.g. sitting, standing) as opposed to elevated, and immobility, all contribute to leg oedema.

Bed rest and elevation may reduce oedema of the ankle and leg before compression bandages are applied. Diuretics can be considered however should always should be monitored and reviewed by a GP regularly.

7.  **Managing Dermatitis**

Use an emollient and a mild to moderate potency topical corticosteroid ointment. If compression bandaging is being used, consider replacing bandages more frequently than once weekly to apply topical treatment.

If there is no improvement with an emollient and a moderately potent topical corticosteroid, or there are concerns about allergic reaction contact dermatitis (worsening rash with topical treatment at any stage), refer the person to Dermatology for consideration for testing, and advise them to avoid any allergens subsequently identified.

Contact dermatitis caused by bandages is well demarcated (i.e. stops where the bandage stops). Common sensitizers include wool alcohols (lanolin), topical antibiotics, topical corticosteroids, cetyl stearyl alcohols, parabens, and rubber mixes.
### Features

<table>
<thead>
<tr>
<th>Features</th>
<th>Venous Eczema</th>
<th>Cellulitis</th>
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</thead>
<tbody>
<tr>
<td>History</td>
<td>Chronic (usually)</td>
<td>Insidious (24-72 hours)</td>
</tr>
<tr>
<td>Appearance</td>
<td>Red, painful to touch, haemosiderin pigmentation</td>
<td>Red, warm, tender to touch</td>
</tr>
<tr>
<td>Rash margin</td>
<td>Diffuse (poorly demarcated)</td>
<td>Well demarcated</td>
</tr>
<tr>
<td>Symptoms</td>
<td>Itchy</td>
<td>Not itchy, person is systemically unwell, pyrexia</td>
</tr>
<tr>
<td>Scaling</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### 8. Cellulitis

Cellulitis is an infection of the deeper layers of the skin and the underlying tissue. The main symptom of cellulitis is the affected area of skin suddenly turning red, painful swollen and hot. It most often affects the legs, but can occur anywhere on the body. If there is a leg ulcer present, please take a wound swab to confirm diagnosis.

There is a need to establish if the cellulitis is an acute or chronic episode. Discuss treatment options with GP.

- **Acute** – requires intravenous antibiotics to prevent hospital admission.
- **Chronic** – may require oral antibiotics and compression hosiery for long term management to prevent reoccurrence.

If cellulitis is present, compression can be applied if the patient can tolerate. Compression can be temporarily reduced to ease pain and then returned to high compression – 40mmHg, as soon as possible.

### 9. ‘Red Legs’

This is often misdiagnosed as cellulitis. Symptoms include bilateral lower limb redness, warmth and tenderness WITHOUT a raised systemic temperature or malaise. Appropriate skin care which may include a corticosteroid cream and long-term compression therapy should be implemented. Patients most at risk of developing red legs are those who are unable to self-care.

### 10. Cleansing a venous leg ulcer

Irrigate the ulcer at each dressing change with warm tap water or saline, and then dry. **NOTE:** strict aseptic technique is not required.

Remove slough, necrotic, fibrous, or excess granulation tissue by gentle washing.

**Do not** perform any sharp debridement of the ulcer unless you have received the relevant training.

Consider using potassium permanganate 0.01% soaks if the ulcer is malodourous. Potassium permanganate soaks are helpful for malodourous ulcers because they have antiseptic and astringent properties. (NICE, 2015)

### 11. When and how to take a swab

Most leg ulcers are not clinically infected but are likely to be colonized by bacteria. Antibiotics do not help to promote healing when a when a leg ulcer is not clinically infected.
DO NOT take a sample for microbiological testing from a leg ulcer at initial presentation, even if it may be infected. Only consider taking a swab if the signs and symptoms of the infection are worsening or have not improved as expected.

PRIOR TO TAKING A SWAB, PLEASE ENSURE YOU HAVE WASHED YOUR HANDS AND ENSURE YOU ARE WEARING PERSONAL PROTECTIVE EQUIPMENT (PPE).

- Clean the infected ulcer with tap water or saline prior to taking a swab to remove unhealthy tissue.
- Move the swab slowly across the ulcer in a zig-zag motion. This will allow the swab to pick up any loose material. Alternatively, roll the swab across a 1cm area of the wound bed, applying gentle pressure to release exudate.
- Venous leg ulcers should not routinely be swabbed unless there is clinical evidence of infection.

12. Managing Infection
Only offer an antibiotic for adults with a leg ulcer when there are physical signs or symptoms of infection – redness, swelling spreading beyond the ulcer, localised warmth, increased pain or fever. REMEMBER: this should NOT be on initial assessment of the leg ulcer.

Advice should be given to seek medical advice if symptoms or signs of the infection worsen rapidly or significantly at the time or do not start to improve within two to three days of starting treatment. Please see Suspected Sepsis Pathway flowchart – Community.

If a leg ulcer becomes infected and compression bandaging is being used, remove the bandaging, and restart compression therapy once the infection has resolved. However some patients may be able to tolerate reduced compression with infection present but reviews should be more frequent.

NICE (2020) have provided guidance on prescribing - NG152

13. Pain
Determine the duration, nature, and severity of the pain to exclude an additional cause. Worsening pain may indicate poor ulcer healing, arterial disease, diabetic neuropathy, or cellulitis.

Venous disease and venous leg ulcers are frequently painful. The pain experienced may be constant or intermittent. Severe or worsening pain may indicate a complication. Constant pain can originate from vascular structures (superficial, deep phlebitis), pitting oedema, collagen (lipodermatosclerosis), or infection. Intermittent pain can be related to dressing changes or debridement procedures. Advise the person that leg elevation will help with the pain associated with oedema. Review analgesia regularly.

14. Training
Health Professionals:
Health professionals identified by the line manager as requiring the skills and knowledge to assess, manage, treat and evaluate the care of patients with leg ulceration must:
- Attend and complete the Trust Leg Ulcer course
- Demonstrate appropriate competence in Doppler assessment to exclude arterial insufficiency
- Demonstrate appropriate competence in compression bandaging and hosiery
15. **Compression Bandages – classification and use**

All bandages used in compression must be applied on top of padding (sub compression wadding bandage) to prevent friction and pressure damage over bony prominences by spreading pressure across a greater area. Bandages should be applied toe to knee at 50% stretch and with 50% overlap but specific manufacturer’s instructions should be followed for each bandage. Products currently available are outlined in the Trust Formulary.

15.1 **Light compression bandages**

These provide low levels of compression (Class 3a, 14-17 mmHg at the ankle). These Class 3a bandages can be applied in a spiral or a figure of eight, according to manufacturer’s instructions, and can be used as a component of a layered system.

15.2 **High compression bandages**

These provide and maintain high levels of compression (Class 3c, 25-35 mmHg at the ankle). Class 3c bandages are useful for bigger legs or more active patients. They can be used over padding on their own or as part of a layered system, and should be applied in a spiral, according to manufacturer’s instructions.

15.3 **Cohesive compression bandages**

These provide light support. The cohesive bandages adhere to themselves but not to skin. They are useful as an outer layer in layered systems and to prevent slippage.

15.4 **Short stretch compression bandages**

These bandages have limited extensibility and should be applied at full stretch, and according to manufacturer’s instructions. They are applied over padding in one or two layers.

15.5 **Short stretch cohesive compression bandages**

These bandages have limited extensibility and should also be applied at full stretch and according to manufacturer’s instructions. They are applied over padding in one or two layers and have a cohesive component to prevent slippage.

15.6 **Two layer systems**

These are two layer compression systems comprising an inner layer, and an outer compression or cohesive compression layer. These vary in type and should be applied according to manufacturer's instructions.

15.7 **Multilayer compression systems**

These are usually four layer systems which are commercially available as kits. Different kits are available comprising slightly different components for different ankle sizes. These should be applied according to manufacturer's instructions. Four layer kits commonly comprise:

A wound contact low adherent dressing
Layer 1 sub compression wadding bandage (one or two rolls depending on ankle size)
Layer 2 support bandage
Layer 3 compression bandage, class 3a or class3c, depending on ankle size
Layer 4 cohesive compression bandage

Waterproof protectors (Limbo) for bathing/showering are available on prescription.

16. Common Patient-Related Complexities

Patients with a high BMI or large limbs:

The main challenge is immobility and venous hypertension in the lower limb and abdomen. For patients with systemic organ disorders, such as congestive heart failure or kidney failure, the main challenge is peripheral oedema. In cases such as these, compression should be considered with caution and under supervision form specialist teams such as the Vascular service/Dermatology.

Very tall people:

Defined as over 6 foot, this group of patients can pose a challenge as they often have higher hydrostatic pressure, which can make achieving effective compression difficult. This can be achieved by applying high compression – at least 40mmHg. Compression therapy kits and longer bandages may be needed if the length between the ankle and knee is longer than average.

Patients with abnormal shaped limb:

Patients with abnormal shaped limbs or very slim legs, require padding and shaping to normalize the limb shape. Alternative forms of compression such as compression wraps may be useful.

17. Emollients and Good Skin Care

Dry scaly skin needs to be treated with a non-perfumed emollient to keep the skin moist. The patient should be advised to use it as often as possible, ideally once or twice a day. They should also avoid perfumed soaps and dry their legs and feet carefully to prevent irritation.

Skin irritation (dermatitis) near a leg ulcer is usually caused by the leaky veins, but may sometimes be due to treatments such as creams, dressings and bandages. A referral to dermatology may be beneficial.

18. Patients with Diabetes

Caution: Patients with Diabetes may show higher ABPI readings and results should always be read in conjunction with patient history and clinical examination. If any concerns, contact Tissue Viability for further advice.

Refer to Podiatry for foot care if not already known to the service.
Appendix 1 – Leg Ulcer Pathway

LEG ULCER PATHWAY

Does the patient attend a clinic?

Does a 10cm wound dressing cover the wound? Is there minimal exudate?

Commence Leg Ulcer Treatment Algorithm

Does a 10cm wound dressing cover the wound? Is there minimal exudate?

Community Care Nurses home visit

Does it mixed? (ABPI <0.8–0.6)

Is it venous? (ABPI 0.8–1.3)

Is it arterial? (ABPI <0.6)

Aetiology

Can the patient apply a compression stocking?

Can the patient apply a compression stocking?

Refer to Vascular

2 x Compression Stocking liners / wrap system (reduced compression)

British Class II Compression Stockings (reduced compression)

Measure for Leg Ulcer Hosiery Kit

Measure for adjustable compression garment

Has any compression been used previously to treat the ulcer?

Atrauman under chosen compression

UrgoStart Plus Border under chosen compression

After 2 week assessment: Has there been an improvement or visible reduction in wound size

WOUND HEALED

Follow pathway for a healed leg ulcer

If there are concerns re: infection please contact tissue viability
TREATMENT ALGORITHM

All patients referred for a lower leg wound will require a full leg ulcer assessment from 2-4 weeks ABPI reading 0.8-1.3 Full Compression*
ABPI reading <0.8-0.6 Reduced Compression* following discussion with TVN (<0.6 or >1.3 refer to vascular) Refer to Leg Ulcer Management Guidelines for assessment guidance

Treatment:
1) Arausman (new wound, or has not previously been treated with compression, with less than 20% slough)
2) UrgoStart Plus (for recurring wounds, wounds with more than 20% slough or wounds with no progression at 2 weeks of treatment)
3) Zetuvit (Low/Medium exudate levels) or Kliniderm Superabsorbent (High exudate levels) - if required
4) Compression*

If no improvement at 4 week review, or there are clinical concerns before 4 weeks refer to the Tissue Viability Service

If yes:
- Conside UrgoStart Plus Border & either Leg Ulcer Kits or Adjustable Compression Garment (Wrap) for wounds <10cm with low exudate

FORTNIGHTLY REVIEW TO INCLUDE COMPLETION OF WOUND CHART

Following expected healing progression, more than 40% reduction in wound surface area at 8 week review

Yes -> Continue current regime. On healing, prescribe compression hosiery and re-assess and complete ABPI studies every 6 months. If the patient has no active ulceration and repeated stable readings consider yearly assessments. 3 month ABPI for 1st episode of Leg Ulceration. If not healed within 16 weeks refer to Tissue Viability Service. Please reassess sooner if the skin breaks down or the patient has symptoms of vascular deterioration

No -> Commence or continue with UrgoStart Plus as primary contact layer + Compression*
Ensure thorough reassessments considering microbial imbalance, presence of biofilms or patient concordance

Refer to Tissue Viability Service if not healed within 16 weeks

Comorbidities:
1) Diabetes
2) COPD
3) CCF
4) PAD
5) Obesity
6) Medication
7) Rheumatoid Arthritis
8) Mixed aetiology

Emollients:
- Cleanse lower limb, ensuring maintenance of skin hydration, with appropriate emollient

Bacterial Burden:
1) Contaminated
2) Colonised
3) Local Infection
4) Spreading Infection
5) Systemic Infection

Wound swab as per Trust protocol

*Compression
(Angle measurements required to ensure the correct kit is used)

Full Compression: UrgoKTwo
Compliance: (40mmHg)
Reduced Compression: UrgoKTwo Reduced
Compliance: (20mmHg)

If considering adjustable compression garment (wrap) contact TVNs

Do not retain a paper version of this document, always view from the website www.cwp.nhs.uk to ensure it is the correct version
### GUIDANCE FOR USE

#### PRIMARY DRESSINGS
- **Atraumax**: Non medicated, polyester mesh
- **UrgoStart Plus**: TLC-NOSF Healing Matrix and poly-absorbent
- **GUIDANCE**: Use from day 0 to full healing, unless wound fibres, bordered or pad infection present

#### ANTIMICROBIAL DRESSINGS (Use when bacterial burden is imbalanced)
- **UrgoClean Ag**: Silver poly-absorbent fibre dressing with TLC-Ag
- **GUIDANCE**: For all levels of exudate
- **Cutimed Sorbact Gel**: Cutimed Sorbact swab with an amorphous hydrogel
- **GUIDANCE**: For sloughy wounds with low exudate levels
- **Flaminal**: Alginate Gel containing 2 antimicrobial enzymes
- **GUIDANCE**: For low to moderately exuding wounds

#### ABSORBENT DRESSINGS
- **Zotuvit**: Absorbent cellulose pad
- **GUIDANCE**: Depending on exudate levels *
- **Kliniderm Superabsorbent**: Absorbent polyurethane foam
- **GUIDANCE**: Depending on exudate levels *

#### COMPRESSION
- **GUIDANCE**: Remember to measure and follow manufacturers guidance for the correct selection of size
- **UrgoKtwo/UrgoKtwo Latex Free**: Two layer compression bandage system
- **GUIDANCE**: Full or reduced compression
- **KFour (Kleen, Klyfe, KFlex, KFlex)**: Four layer compression bandage system
- **GUIDANCE**: Full or reduced compression
- **Leg Ulcer Kit**: Leg Ulcer Hosiery Kit (liner + hosiery)
- **Leg Ulcer Kit**: Full compression
- **Actico**: Cohesive compression bandage system
- **GUIDANCE**: Lymphoedema/Lymphoedema/grossly misshapen limb
- **Adjustable Compression Garments (Wrap)**: Inelastic, adjustable compression garments
- **GUIDANCE**: Contact TVN

### BACTERIAL BURDEN

#### Contaminated
- **Colonised**
- **Local Infection**
- **Overt**
- **Spreading Infection**
- **Systemic Infection**

#### Wound Swabbing
- **GUIDANCE**: Refer to Trust Infection Control Guidance

#### Exudate Levels
1) None  
2) Low  
3) Medium  
4) High

#### VIGILANCE

#### ACTION

### TISSUE TYPE

#### Necrotic
- **Rehydrate and debride dead tissue**
- **CAUTION**: Vascular studies are required before active treatment is commenced. If poor blood supply, keep wounds dry do not aim to debride with dressings.

#### Sloughy
- **Remove dead tissue, manage exudate and prevent infection.**
- **Exudate volume will increase as dead tissue is rehydrated and autolytic debridement occurs.**

#### Mixed
- **Remove dead tissue, manage exudate and prevent infection.**
- **Exudate volume will increase as dead tissue is rehydrated and autolytic debridement occurs.**

#### Granulating
- **Promote healing and prevent infection.**
- **Cavity wounds will need to be packed to promote granulation from the base of the wound.**

#### Epithelialising
- **Protect newly formed skin.**
- **Wounds that have been covered over with a top layer of skin may not require a wound dressing and simple moisturising products may be preferred.**

#### Infected
- **Reduce bacterial burden.**
- **Disrupt biofilms and restore bacterial balance. Exudate levels are likely to increase.**

---

Do not retain a paper version of this document, always view from the website www.cwp.nhs.uk to ensure it is the correct version.
NB: Ankle Brachial Pressure Index (ABPI) assessment to be performed every 12 weeks whilst the leg ulcer is active. ABPI assessment to continue 6-12 monthly once healed, as per Trust Guidelines.

**Dressings & Treatment Regimens.**
- Dressing regimes should only be changed based on assessment of the wound. A clear rationale must be provided to support a change.
- Do not change dressing regime < 2 weekly unless due to allergic reaction or visible signs of local infection.
- All health care professionals should make themselves aware of manufacturers guidance for each dressing product used.
- Antimicrobial dressings must only be used when signs of local, spreading or systemic infection are present. Immunosuppressed patients may not have the expected response to infection. This type of dressing must only be used initially for 2 weeks. After 2 weeks, reassess the wound to establish if longer term antimicrobial treatment is required. Consult with local TVN/Microbiologist for longer term use as per your local policy.
- Do not routinely amend the treatment plan unless required.
- Ensure nutritional screening using Trust screening tool, such as MUST. Refer to dietitian as appropriate.
- Ensure pressure ulcer risk assessment and care plan is completed.

**Quality of Life Assessment**
- The QoL assessment is to be completed during the first assessment and then at week 8 and week 16.
- It is designed for the patient to complete themselves where possible.
- Once completed scan document and upload onto patients notes in EMIS and place the paper copy in the back of this booklet.

**Evidence Based Practice:**
Appendix 2 – Quality of Life Wound Checklist

Quality of Life Wound Checklist

Name.......................... Date.........

Date of birth....................... NHS number

A wound (or cut, injury, ulcer) is a break to the skin that may be taking some time to heal. Please answer these questions about how you are coping with your wound.

1. Can you walk as well as you did before you had your wound?

   Yes  Sometimes  No

2. Can you go out as easily as before you had your wound?

   Yes  Sometimes  No

3. Do you eat well?

   Yes  Sometimes  No

4. Are you able to have a shower or bath?

   Yes  Sometimes  No

5. Are you able to wear clothes and shoes that you want to?

   Yes  Sometimes  No

Clear communication by Asist  Illustrations by Laura Green
6. Do you get a good night’s sleep?

7. Please circle the picture to show if you sleep in a bed or in a chair.

8. Please circle a number to show how your pain has been recently.

9. What medication do you take for your pain?

10. Where do you get your support from?

11. How do you rate your overall quality of life?
   Please circle the number to show your answer

   0 = worst quality of life  100 = best quality of life

For information please contact Julie Green at j.green@keele.ac.uk © 2017 Keele University. All rights reserved. This checklist has been developed by Nurses, Service Users and other stakeholders for use with adults with wounds. Development has been supported by the RCN Foundation Funding. Review date: February 2020
Appendix 3 – Healed Ulcer Guidance

HEALED ULCER GUIDANCE

Dressings & Treatment Regimens

• Once the leg ulcer is healed, it is recommended that compression treatment continues indefinitely, as this reduces ulcer recurrence compared with no compression treatment.
• It is recommended that the strongest compression levels that can be accepted and applied are used.
• If possible compression stockings should be removed at bedtime, but they can be worn continuously for up to a maximum of 7 days.
• Compression stockings need to be cared for as per the manufacturer’s instructions and should be replaced every 3–6 months. The leg should be re-measured each time.
• A range of devices are available to aid the application of stockings.

Evidence Based Practice:


Compression Classes

<table>
<thead>
<tr>
<th>British Standard</th>
<th>European Class and Rel-GZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class One 14-17mmHg</td>
<td>Class One 18-21mmHg</td>
</tr>
<tr>
<td>Class Two 18-24mmHg</td>
<td>Class Two 23-32mmHg</td>
</tr>
<tr>
<td>Class Three 25-35mmHg</td>
<td>Class Three 34-46mmHg</td>
</tr>
<tr>
<td></td>
<td>Class Four &gt;49mmHg</td>
</tr>
</tbody>
</table>

RECURRENT PREVENTION FOR HEALED ULCER: Compression Hosiery Details

Healed Date: ...............................................................

<table>
<thead>
<tr>
<th>Date of review</th>
<th>ABPI reading</th>
<th>ABPI review date (at 3, 6, 12 months)</th>
<th>Hosiery Product type + style</th>
<th>Class</th>
<th>Size + Colour</th>
</tr>
</thead>
<tbody>
<tr>
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Useful contact numbers: ........................................................................................................................................

Community Care Team: ........................................................................................................................................

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HEALED VENOUS LEG ULCER TRAFFIC LIGHTS MARKING GRID

- Symptomatic & Multiple ☐ in Red Zone refer for vascular opinion, stay in Red light assessment recall time.
- 3 or more ☐ in Amber Zone - stay in Amber light assessment recall time. Multiple ☐ in Amber Zone - Go to Green light assessment recall time.
- Multiple ☐ in Green Zone - stay in Green light assessment recall time.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Smokes</td>
<td>Able to report problems</td>
<td>DVT</td>
</tr>
<tr>
<td>Intermittent claudication</td>
<td>Able to apply hosiery unaided</td>
<td>Varicose Veins</td>
</tr>
<tr>
<td>Pain on rest / elevating limb</td>
<td>Understands need for skin care &amp; Compliance with wearing hosiery.</td>
<td>Thrombophlebitis</td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>Good short-term memory</td>
<td>Lower leg trauma</td>
</tr>
<tr>
<td>Anaemia</td>
<td>Mobile &amp; free ankle movement</td>
<td>Orthopaedic surgery.</td>
</tr>
<tr>
<td>Thyroid problems</td>
<td>Normal weight</td>
<td>Multiple pregnancies.</td>
</tr>
<tr>
<td>Weight / waist circumference unsatisfactory.</td>
<td>Over weight or increased waist circumference.</td>
<td></td>
</tr>
<tr>
<td>Existing co-morbidities; Diabetes/ MI/ Angina / Ischaemic heart disease/ TIA / Stroke (CVA).</td>
<td>3 or more ☐ in orange risk factors - stay in amber light assessment recall time.</td>
<td>Must not have ☐ arterial risk factors to stay in Green light assessment recall time.</td>
</tr>
</tbody>
</table>

RED ASSESSMENT RECALL TIME: 6 MONTHS

AMBER ASSESSMENT RECALL TIME: 6 MONTHS

GREEN ASSESSMENT RECALL TIME: 12 MONTHS
Appendix 4 – Body Map