Leg Ulcer Assessment, Prevention and Management Guidelines

For use in:          Acute Trust
For use by:         Registered Nurses
For use for:    Adult patients with leg ulcers
Document owner:  Helen Langthorne – Leg Ulcer Nurse Specialist
Approval Committee  ADN Surgery
Status: (date approved)  22/03/2016
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Introduction
The purpose of this document is to provide guidelines for Registered Nurses in leg ulcer management.

These guidelines are based on the recommendation from the Royal College of Nursing (RCN) "The Management of Patients with Leg Ulcers" (2006) and the Scottish Intercollegiate Guidelines Network "Management of Chronic Venous Leg Ulcers" (2010) and NICE Clinical Knowledge Summaries (Venous Leg Ulceration) (2012).

Related Documents
Patient leaflet number 32, “Understanding your leg ulcer”.

1. Definition of Terms

Cellulitis: An inflammation of the connective tissue underlying the skin that can be caused by a bacterial infection.

Eczema: A form of dermatitis, or inflammation of the upper layers of the skin.

Epithelisation: A new layer of epidermis that covers granulating tissue.

Granulation tissue: The perfused, fibrous connective tissue that replaces a fibrin clot in healing wounds. Granulation tissue typically grows from the base of a wound and is able to fill wounds of almost any size it heals.

Hyperkeratotic skin: A thickening of the outer layer of the skin, which contains a tough, protective protein called keratin.

Leg ulcer: A loss of skin below the knee on the leg or foot which takes more than six weeks to heal (Dale 1983).

Maceration: The softening and whitening of skin kept constantly wet, leaving it more vulnerable to infection or damage by tearing.

Necrosis: The name given to accidental death of cells and living tissue.

Oedema: The increase of interstitial fluid in any organ — swelling.

Slough: A layer or mass of dead tissue separated from surrounding living tissue, as in a wound, sore, or inflammation.

2. Roles and Responsibilities

Registered Nurses
It is the responsibility of all Registered Nurses, whether permanent or temporary, to ensure they are competent and have completed all competencies in Leg Ulcer Management before commencing practice unsupervised.

The Registered Nurse conducting the assessment should be aware that leg ulcers may not be wholly venous in nature but may be or in part due to arterial disease, rheumatoid arthritis, diabetes, and malignancy. Any unusual appearance should be recorded and if there is any doubt or concern referral to the Leg Ulcer Nurse Specialist is advised.

Leg Ulcer, Vascular and Dermatology Nurse Specialists
The Leg Ulcer, Vascular and Dermatology Nurse Specialists will support and advise where applicable (please follow flow chart in Appendix A).

3. Process

Assessment

Inpatient
On admission, please remove all bandaging/dressings and follow the Leg Ulcer Care Pathway (Appendix A). Contact either the Practice Nurse or District Nurse, regarding current treatment and Doppler results.

A full clinical history, clinical examination and wound assessment should be carried out within 24 hours of admission by a Registered Nurse:
- This should include patient’s mobility, social circumstances and assessment of the ulcer and surrounding skin.
- The tissue type in the wound bed should be noted at first presentation and as part of the ongoing evaluation (e.g. necrosis, slough, granulation tissue, epithelialisation) and the degree and consistency of the exudate.
- The presence of cellulitis, oedema, eczema, hyperkeratotic skin and maceration should be recorded at first presentation and as part of routine monitoring thereafter (see Definition of terms for description of conditions).
- Findings should be documented on the wound assessment chart (Appendix B) and all measurements should be recorded on the body map within the nursing documentation.
- Blood pressure measurement, weight, bloods (Hb, ESR, Us & Es, thyroid function, cholesterol and fasting triglycerides, glucose), should be taken and recorded.

Patients should receive education and an information handbook during the initial assessment, this should be available on the ward or in the department, (order via patient leaflets).

Patient leaflet number 32, “Understanding your leg ulcer” should be issued.

Making a Referral to the Leg Ulcer Service

Inpatients
Referrals can be made via telephone to the Leg Ulcer Nurse Specialist on extension 8326 after completion of the wound assessment chart (Appendix B).

Information Required for Referral
- Patient details.
- Past medical history.
- Current ulcer history.
- Doppler result.
- Medication.
- Pain.
- Current health status including mobility, smoking and nutritional status.

Factors Requiring Referral
- Leg ulcers suspected of non-venous aetiology.
- Reduced ankle brachial pressure index (ABPI) (below 0.8).
- Rapid deterioration of wound.
• Any wound where the underlying diagnosis is uncertain.
• Any wound which enlarges on treatment suspected malignancy.
• Failure to control state of skin around the wound.
• Wound complicated by diabetes mellitus, all diabetics should be referred to the diabetic clinic.
• Contact dermatitis resistant to topical steroids.
• Unexplained or uncontrolled pain.
• Healed ulcers with a view to venous surgery.
• Leg ulcers that have been treated according to the guidelines for 3 months and have failed to improve.

Treatment
• Registered Nurses should be aware that patients may become sensitised to elements of their treatment at any time.
• Products that commonly cause skin sensitivity, such as those containing lanolin and topical antibiotics, should be avoided on patients with leg ulcers. (Refer to the Dermatology Nurse for advice if unsure via extension 4497).
• Ensure that the patient has been prescribed adequate analgesia and monitor its effect, using the Trust pain rating score. If necessary refer to the Pain Team for advice via extension 2378).
• Caring for the surrounding skin is as important as caring for the ulcers, for patients with dry flaky skin:
  o Wash legs in a lined bucket of warm water. (Change liner and water for each leg).
  o Carefully dry legs using clean towel for each leg to avoid cross infection.
  o Carefully remove all flaking dead skin then liberally apply an emollient in a downward movement at each dressing change (paraffin based products are the safest).
  o The Registered Nurse should assess the wound to decide which dressing is appropriate.
• Things to consider:
  o Known sensitivities.
  o A dressing that is comfortable.
  o A non-adherent dressing to prevent trauma.
  o Exudate management.
  o To debride slough or necrosis.
  o Odour control.
• Always bandage spirally from toe to knee.
• Encourage patient’s mobility.
• Elevate legs at all other times.

4. Training
Practitioners should attend formal training to undertake leg ulcer management and mandatory update sessions yearly thereafter (available to book in-house via the electronic training database, the course is delivered by the Leg Ulcer, Dermatology and Vascular Clinical Nurse Specialists). After formal training has taken place, the practitioner should complete all competencies (available on the Trust intranet), keep a copy for their portfolio and give a copy to their Ward Sister/Charge Nurse.

5. Evidence Base
Dale et al (1983) “Chronic Ulcers of the leg: a study of prevalence in a Scottish community” Health bulletin (Edinburgh) 41.6 310-14

6. Monitoring Compliance and Audit
Monitoring compliance will be performed by the Leg Ulcer Nurse Specialist on receipt of referral to ensure that documentation is accurate and completed in a timely manner. Feedback will be given to the ward area/dept.

These guidelines will be reviewed every three years.

This guideline is available on the Trust intranet. All staff are notified via email, of the guideline and any amendments.
Appendix A

Leg Ulcer Care

Inpatient
- Remove all bandages and dressings and complete a wound assessment chart
- Contact District Nurse/Practice Nurse
  - Record last Doppler date and results-inclusive of current treatment

Cellulitis
- Commence antibiotics as per doctors instructions

Without skin loss
- Monitor condition of skin integrity
- Keep legs elevated

With skin loss
- Wound swab
- Complete wound assessment
- Choose non-adherent dressing
- Manage surrounding skin
- Keep legs elevated

Has patient responded to antibiotic therapy? i.e. inflammation has subsided, but oedema present
- NO
- YES

Leg Ulcers
- Support therapy
- Complete wound assessment chart
- Wash legs in warm water
- Apply emollient
- If no response in 48 hours refer to Dermatology nurse ext 4497

Skin Conditions
- Monitor surrounding skin
- Wash leg in warm water
- Apply emollient

Cellulitis
- Commence antibiotics as per doctors instructions

Without skin loss
- Monitor condition of skin integrity
- Keep legs elevated

With skin loss
- Wound swab
- Complete wound assessment
- Choose non-adherent dressing
- Manage surrounding skin
- Keep legs elevated

Has patient responded to antibiotic therapy? i.e. inflammation has subsided, but oedema present
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Without skin loss
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With skin loss
- Wound swab
- Complete wound assessment
- Choose non-adherent dressing
- Manage surrounding skin
- Keep legs elevated

Has patient responded to antibiotic therapy? i.e. inflammation has subsided, but oedema present
- NO
- YES

Apply wound dressing-non adherant i.e. Tubifast blue line, Orthopaedic wool 10cm x 4m Elastocrepe 10cm x 4m

Encourage mobility
- Keep legs elevated

NB All bandages & orthopaedic wool to be applied spirally from base of toe to knee
Bandage change every 5th day unless exudate warrants more regular cleaning
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<tr>
<th>Date and time:</th>
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<td>e.g. location, sloughy, dry, infected etc.</td>
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</tr>
<tr>
<td>Other contributors:</td>
<td>Emma Rayner, Susan Robertson</td>
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<tr>
<td>Approvals and endorsements:</td>
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<tr>
<td>Consultation: to include stakeholders &amp; users</td>
<td>Emma Rayner – Vascular Nurse Specialist Susan Robertson – Dermatology Nurse Specialist</td>
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