**LOWER LIMB WOUND**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Reference Number** | **Version** | **Status** | **Executive Lead(s)** | **Author(s)** |
| n/a | 2.0 | Approved |  | Rebecca Banks CNS TVN  Nikki Fenwick CNS Vascular  Hazel Trender CNS Vascular  Siobhan Roberts AWC Team Leader  Kim Drewery CNS TVN |
| Approval Bodies | ICC Quarterly Governance Meeting | 20th April 2021 | Helen Chapman |  |
| TPC Governance | 07th May 2021 | Mark Cobb |  |
| Ratified by | Helen Chapman | 20th April 2021 | TBC |  |
| Review Date | May 2023 |  |  |  |
| Date issued | May 2021 |  |  |  |
| Contact for review | CCAG Governance |  |  |  |

**MANAGEMENT PATHWAY**

**Introduction**

The purpose of the lower leg pathway is to guide all clinicians who provide care for patients in community settings with lower leg wounds and oedema in their clinical decision making. The aim of the document is to ensure all patients across Sheffield receive evidence based care and have timely access to appropriate services.

The document is divided into 4 pathways. These have been written to reflect the care required at various stages in lower leg wound management.

Pathway 1 Initial Management

This pathway should be followed by all clinicians to whom a patient may initially present with a lower leg wound.

Pathways 2 & 3 Assessment & Referral & Compression Pathway

These pathways should be followed by trained clinicians in leg ulcer management

Pathway 4 Maintenance

This pathway should be followed by a trained clinician in leg ulcer and hosiery management

All onward referrals within the pathway will be received Monday-Friday 08:30-16:30.

**LOWER LIMB WOUND MANAGEMENT PATHWAY**

**1. INITIAL MANAGEMENT - PRACTICE NURSE, DISTRICT NURSE**

**PATIENT WITH A WOUND ON THE LOWER LIMB**

**For critical limb ischaemia discuss with GP & refer urgently to Vascular (1) – NGH- On call 07964975973**

**RED FLAG ASSESSMENT**

* **Critical limb ischaemia (pain at rest/foot ulcers)**
* **Spreading infection**
* **Symptoms of sepsis**
* **Red/hot swollen leg**
* **Suspected DVT**
* **Suspected skin cancer**

**Consider:**

* **Acute heart failure**
* **Renal Failure**
* **End of life**

# **LOWER LIMB WOUND MANAGEMENT PATHWAY**

**Patients with diabetes and a foot wound – Refer to Diabetic Foot Pathway. Diabetic MDT foot clinic** [**sth.foot@nhs.net**](mailto:sth.foot@nhs.net) **07775413188**

**Within 14 days of a patient presenting with a wound/on to your caseload commence the following:**

1. **Take FBC, LFT, U&E, HBAIC and BNP (if heart failure suspected).**
2. **Complete a wound assessment and upload images.**
3. **Cleanse the wound and the surrounding skin.**
4. **Apply a simple low adherent dressing:**

**Low exudate -Silicone Foam Border (under compression hosiery only)**

**High exudate – NA Ultra plus super-absorbent dressing e.g. Kerramax Care**

1. **Local Infection – Urgotul Ag for 2 weeks and consider antibiotics**
2. **Check foot pulses and document in records.**
3. **Palpate foot pulses:**

**Foot pulse present – Prescribe British Standard Class 1 hosiery.**

**Foot pulse absent – Prescribe hosiery 10mmHg liner.**

1. **Apply wool and K-Lite (toe to knee, 50 % overlap) until hosiery available.**

**Ankle circumference <18cm ankle 1 x K-Lite**

**Ankle circumference >18cm ankle 2 x K-Lite**

7.A

**No**

**ONWARD REFERRAL**

**If not housebound refer immediately to Ambulatory Wound Clinic (AWC).**

**sth.ambulatorywoundclinics@nhs.net**

**OR**

**If housebound refer to District Nurse (DN) service .** [**sht-tr.SPA@nhs.net**](mailto:sht-tr.SPA@nhs.net)

**ON-GOING WOUND CARE**

* **Promote patient self-care (provide patient information leaflets – see appendix).**
* **Continue with planned care above until seen in AWC or by DN service.**
* **Any concerns with wound deterioration take images and refer to TVN for advice.**

**Yes**

**Discuss urgently with GP if yes to any of the other red flag symptoms & seek TVN advice for interim management.**

**Yes**

**2. ASSESSMENT & REFERRAL FOR DISTRICT NURSE / AMBULATORY WOUND CLINIC**

**PATIENT WITH A WOUND ON THE LOWER LIMB**

**ABPI 0.61-0.79**

**Refer to Vascular Nurse Specialist. Continue with current treatment.**

[**sth.vascularadmin@nhs.net**](mailto:sth.vascularadmin@nhs.net)

**ABPI <0.6**

**URGENTLY refer to Vascular Nurse Specialist. Change treatment to wool & x1 Klite**

[**sth.vascularadmin@nhs.net**](mailto:sth.vascularadmin@nhs.net)

**No**

* **Complete lower leg assessment within 14 days (bi-lateral).**
* **Complete wound assessment and images**
* **Discuss with leg ulcer champion or TVN if support needed with assessment interpretation.**
* **Assess/manage both legs.**
* **Any non-diabetic foot wound refer to Community Podiatry**

**Yes**

**Yes**

**RED FLAG ASSESSMENT**

* **Spreading infection**
* **Symptoms of sepsis**
* **Red/hot swollen leg**
* **Critical limb ischaemia (painat rest/foot ulcers)**
* **Suspected DVT**
* **Suspected skin cancer**

**No evidence of significant arterial disease:**

**Safe to compress - Do not delay compression** **(See Pathway 3).**

**Refer to Vascular Nurse Specialist - consideration of venous intervention (2,3) e.g. EVLT if:**

1. **Patient is independently mobile and**
2. **BMI <35**

**Or BMI >35 give weight loss advice and refer for consideration.**

**ABPI 0.8-1.3**

**Discuss urgently with GP if yes to any of the other red flag symtoms & seek TVN advice for interim management.**

**Consider:**

* **Acute heart failure**
* **Renal Failure**
* **End of life**

**For critical limb ischaemia discuss with GP & refer urgently to Vascular (1) – NGH on call 07964975973**

**Patients with diabetes and a foot wound – Refer to Diabetic Foot Pathway. Diabetic MDT foot clinic** [**sth.foot@nhs.net**](mailto:sth.foot@nhs.net) **07775413188**

**Consider other causes and discuss with TVN:**

* **Dermatological**
* **Malignancy**
* **Pressure**
* **Autoimmune**
* **Diabetic**
* **Sickle Cell**

**ABPI >1.3**

**Discuss with TVN to consider referral to Vascular Nurse Specialist for further assessment.**

**Signs of venous disease, oedema, skin staining, ankle flare, eczema or varicose veins.**

**LOWER LIMB WOUND MANAGEMENT PATHWAY**

**3. COMPRESSION PATHWAY (ABPI 0.8-1.3) FOR DISTRICT NURSE / AMBULATORY WOUND CLINIC**

**Consider why exudate is present and address any underlying cause’s e.g. Lymphoedema, infection, dependent oedema, heart failure and put steps in place to address.**

**Is the wound exudate controlled within the topical dressing?**

**Consider super absorbent**

**e.g. Kerramax**

**Ye**

**Apply Coban 2 or Compression wrap**

**Yes**

**Aim for full compression. Apply compression hosiery kit if suitable. If not apply Full compression bandaging or Consider a Wrap system**

**Review care plan weekly unless patient self-managing.**

**After 4 weeks of treatment, if there is no improvement refer to Tissue Viability Service for review.**

**If the ulcer does not heal in 12 weeks refer to Tissue Viability Service.**

**Apply Coban 2 &**

**Consider bandaging above knee & referring to the Lymphoedema service for advice.**

**Yes**

**No**

**If the ulcer is still present but oedema, exudate and limb distortion are controlled**

**No**

**Presence of deep skin folds or significant limb distortion?**

**Large volume of reducible oedema?**

**Yes**

**No**

**Significant limb shape distortion or skin folds?**

**Yes**

**No**

**Apply Coban 2 & consider referral to Lymphoedema Specialist for advice**

**Apply Full compression bandaging or Wrap system**

**LOWER LIMB WOUND MANAGEMENT PATHWAY**

**4. Maintenance for healed Venous leg ulcers and prevention of oedema**

**Once healed patient should aim to continue with the current level of compression**

**If patient is suitable for conventional hosiery, prescribe Class 2 (RAL standard) unless advised otherwise by Vascular or Tissue Viability.**

**Open toe must be prescribed for patients with diabetes or neuropathy.**

**If patient is unsuitable for conventional hosiery, consider made to measure hosiery or compression wrap system.**

**Open toe must be prescribed for patients with diabetes or neuropathy.**

**If leg ulcer reoccurs within 12 months, re-evaluate care and discuss with TVN.**

**If leg ulcer reoccurs over 12 months restart Pathway 2.**

**Consider increasing maintenance hosiery to Class 3.**

**Hosiery must be worn for life, even with venous intervention.**

**This should be reviewed and renewed every 3-6 months**

**Education & provision patient information leaflets.**

**Legs should be washed on a regular basis and emollient daily.**

**Review / repeat lower leg assessment as applicable.**

**For patients with diabetes, PAD & neuropathy, complete leg assessment every 6 months. For all other patients, every 12 months unless any change in health.**

i

**LOWER LIMB WOUND MANAGEMENT PATHWAY**

**Additional Information**

|  |  |
| --- | --- |
| **Referral & contact information:**   * **Ambulatory Clinic Wound Clinic**   0114 3078091  Manor Clinic, 12 Ridgeway Road, Sheffield S12 2ST  Email referral form to:  [**sth.ambulatorywoundclinics@nhs.net**](mailto:sth.ambulatorywoundclinics@nhs.net)   * **Tissue Viability Service**   0114 271 4144  Tissue Viability Office  Central Nursing  Northern general Hospital  [sht-tr.sheffieldcommunitytvs@nhs.net](mailto:sht-tr.sheffieldcommunitytvs@nhs.net)   * **Diabetic Foot Clinic**   **07775413188 (Advice Hotline)**  Diabetes & Endocrine Centre, Northern General Hospital.  Referral via EBS or email to:  [**sth.foot@nhs.ne**t](mailto:sth.foot@nhs.net)   * **Vascular Nurse Specialist’s**   **0114 2269311 / 0114 2714688**  Sheffield Vascular Institute, Northern General Hospital  Referral via EBS or email referral form/letter to:  **[sth.vascularadmin@nhs.net](mailto:sth.vascularadmin@nhs.net)**   * **Vascular On call Registrar**   Bleep 2757 via NGH switchboard: 0114 2434343  Consultant - Vascular Surgery  Referral via EBS or email referral to:  [**sht-tr.vascularsurgery@nhs.net**](mailto:sht-tr.vascularsurgery@nhs.net)   * **Community Podiatry**   Podiatry Services, Woodhouse Clinic  Skelton Lane, S13 7LY  Tel: 0114 3078200  [sht-tr.podiatrynewreferrals@nhs.net](mailto:sht-tr.podiatrynewreferrals@nhs.net) | **Patient Information Leaflets:**   * **Leg Ulceration** – PD4735 <http://nww.sth.nhs.uk/STHcontDocs/STH_PIM/VascularServices/pil1352.pdf> * **Exercise Advice; Venous leg ulcers and lower leg oedema**   PD8837  <http://nww.sth.nhs.uk/STHcontDocs/STH_PIM/Community/ICC_Therapy/pil3760.pdf>   * **Cellulitis, looking after my legs** - PD10554 <http://nww.sth.nhs.uk/STHcontDocs/STH_PIM/Nursing/TissueViabilityService/pil4525.pdf> * **Post thrombotic syndrome** – PD5044 <http://nww.sth.nhs.uk/STHcontDocs/STH_PIM/VascularServices/PIL1359.PDF> * **Varicose Veins** – PD4737 <http://nww.sth.nhs.uk/STHcontDocs/STH_PIM/VascularServices/pil1355.pdf> * **Lymphoedema** – PD5223 <http://nww.sth.nhs.uk/STHcontDocs/STH_PIM/VascularServices/pil1358.pdf> |

**Abbreviations & Definitions:**

* **ABPI – Ankle Brachial Pressure Index**, widely used investigation to diagnose peripheral arterial disease.
* **Cellulitis** – Common and potentially serious bacterial infection of the skin. Symptoms include swelling, warmth, pain, blisters, erythema, pyrexia and fever.
* **CLI – Critical Limb Ischaemic –** chronic, inadequate tissue perfusion at rest, defined by rest pain, often worse at night time, with or without tissue loss.
* **DVT** **– Deep vein thrombosis (DVT)** the formation of a thrombus (blood clot) in a deep vein, usually the in the legs, which partially or completely obstructs blood flow (5). Symptoms include pain, swelling and tenderness in one leg, usually calf or thigh.
* **EVLT – Endo Venous Laser Treatment**; minimally invasive treatment for superficial varicose veins.
* **PAD – Peripheral Arterial Disease (PAD)** is the term used to describe a narrowing or occlusion of the peripheral arteries, affecting the blood supply in the lower limbs. (4)
* **Red Flag Symptoms** – Require immediate attention from the relevant specialist to reduce the risk of rapid deterioration or serious harm (6).
* **RAL** – German Classification for compression hosiery; Class 1 - 18-21mmHg, Class 2 - 23-32mmHg.
* **Venous insufficiency –** a condition that occurs when the venous walls or valves within the veins are not working effectively resulting in venous stasis.
* **Venous Intervention –** overarching term for treatments for the superficial venous system including sclerotherapy, EVLT, varicose vein surgery, Clarivein & VenaSeal.

**Bibliography:**

1. Vascular Society Great Britain & Ireland (2019) A best practice clinical care pathway for Peripheral ArterialDisease.https://www.vascularsociety.org.uk/\_userfiles/pages/files/Document%20Library/PAD%20QIF%20March%202019%20v2.pdf
2. Gohel, M. et al (2019) Early versus deferred endovenous ablation of superficial venous reflux in patients with venous ulceration: the EVRA RCT. <https://pubmed.ncbi.nlm.nih.gov/31140402/>
3. National Institute for Health & Care Excellence (2014) Varicose Veins: Diagnosis and Management CG168 <https://www.nice.org.uk/guidance/cg168>
4. NICE Topics A-Z https://cks.nice.org.uk/topics/peripheral-arterial-disease/
5. National Wound Care Strategy Programme – Lower limb recommendations for clinical care https://www.ahsnnetwork.com/wp-content/uploads/2020/11/Lower-Limb-Recommendations-20Nov20.pdf
6. NICE Topics A-Z https://cks.nice.org.uk/topics/deep-vein-thrombosis/

**Review date: May 2023**