Lower Limb Care Pathway

For people with lower limb oedema / lymphoedema, lymphorrhoea or ulceration including those with known or suspected heart failure

NHS Oxford Health NHS Foundation Trust

Initial Presentation

Are there any red flags present for THE APPLIATION OF COMPRESSION THERAPY?

- Acute infection of leg or foot (refer to local wound infection guidance)
- Symptoms of sepsis
- Acute or chronic limb threatening ischaemia
- Suspected acute deep thrombosis (DVT)
- Suspected skin cancer
- Bleeding varicose veins

If any red flags present follow **Guidance 1** overleaf and ESCALATE AS DETAILED.

Are there any red flags present for ACUTE DECOMPENSATED HEART FAILURE?

(worsening of any of the below symptoms in the last 7 days)

- Increasing breathlessness (either at rest or on exertion)
- Presence of truncal oedema
- Increased reports of waking up due to breathlessness (PND)
- Rapid increase in weight
- Inability to lay flat due to breathlessness (orthopnoea)

If patient is already in established compression (i.e. not actively decongesting oedema from limbs) and has an acute episode of deteriorating heart failure – **DO NOT REMOVE COMPRESSION**
If any red flags present, do not apply compression and follow **Guidance 2** overleaf

Immediate and Necessary Compression

- Apply 20mmHg compression therapy to both legs
- Arrange for holistic lower limb assessment, including assessment of vascular status (e.g. ankle brachial pressure index (ABPI)
- Depending on limb shape, apply hosiery liners, reduced compression bandage or wrap system, see **Guidance 3** overleaf

In addition to compression:

- Offer appropriate nutritional and lifestyle advice.
- Provide verbal and written advice about care.
- Discuss and incorporate opportunities for supported self-management
- Skin care - consider appropriate emollient therapy (refer to Wound Care Formulary)
- If needed, treat skin conditions e.g. varicose eczema pathway

if ulceration/lymphorrhoea present, at every dressing change:

- Select appropriate dressing using TIMES wound assessment and formulary (see **Guidance 4** overleaf)
- Refer to local wound infection guidance to identify signs of infection
- Refer to exudate management pathway
- Wound(s) to the foot to be referred to Podiatry

2 Weeks

- Complete holistic lower limb assessment within 14 days.
- A holistic vascular assessment includes ABPI, pedal pulse sounds/waveforms and identification of any venous, arterial and/or oedema signs.
- If an ABPI assessment for those with lymphoedema is unobtainable, in the absence of significant cardiovascular risk factors and clinical signs or symptoms of PAD, it may still be possible to apply compression therapy provided the vascular status has been thoroughly assessed. If unsure, consider referral to Tissue Viability.
- Implement appropriate treatment based on outcome of assessment and diagnosis.
- **NB** - Wraps are not to be used for patients with open wounds as there is no current evidence to support this

- If chronic oedema present, has there been two or more episodes of cellulitis in the past year?
- If **yes**, refer to GP for prophylactic antibiotic therapy (BLS & LSN Guidelines overleaf).

Diagnosis

An ABPI should never be taken in isolation and if there is a significant clinical suspicion of peripheral arterial disease, consider a referral to Vascular.

For patients with chronic limb threatening ischaemia
ABPI <0.6

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- Urgent referral to Vascular
- STOP COMPRESSION
- Complete doppler every 3 months.

For patients with suspected venous disease and peripheral arterial disease (mixed aetiology)
ABPI 0.6 to 0.8

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- Referral to Vascular (for patients with active ulceration).
- Continue with ≤ 20mmHg
- Complete doppler every 3 months

For patients with suspected venous disease but peripheral arterial disease may also be present
ABPI 0.81 - 0.99

and

For patients with suspected venous disease with adequate arterial supply
ABPI 1.0 - 1.4

→

- Routine referral to vascular for venous duplex scans and possible sclerotherapy (for patients with active ulceration).
- Complete further red flag assessment for acute decompensated heart failure, see **Guidance 2**
- If evidence of acute cellulitis, bilateral or soft pitting oedema, follow staged approach to compression therapy, see **Guidance 5** overleaf
- If none of the above are present, apply 40mmHg compression therapy to the affected limb(s)
- For ABPI 0.81 - 0.99 - complete doppler every 6 months
- For ABPI 1.0 - 1.4 - complete doppler every 12 months

For patients with suspected medial wall calcification (unable to occlude pulses) or ABPI >1.4

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- Referral to Tissue Viability.
- Continue with ≤ 20mmHg
- Care must be taken in interpreting ABPI results in people with diabetes, rheumatoid arthritis, systemic vasculitis, atherosclerotic disease and advanced CKD as these could be misleadingly high
- For values above 1.5, the vessels are likely not able to be occluded
- Complete doppler every 3 months

Treatment

Compression

Regular limb shape/mild oedema

- Apply leg ulcer hosiery kit if ulcer present.
- If ulceration is extensive and/or very wet consider compression bandaging.
- If no ulceration present, but compression is required to manage underlying disease, refer to compression hosiery formulary.
- Educate patient on their condition and ongoing treatment.

Moderate-severe oedema and/or distorted limb shape

- Assess full leg including toes, knees and thighs. Patient may require toe caps, stump bandaging and/or thigh high compression.
- Consider referral to Tissue Viability if oedema is severe and/or present to thighs.
- Apply short stretch compression bandage to decongest limb.
- Measure the limb before each application of compression bandaging.
- Consider a compression wrap system for patients who are able to self-care or decongestion of oedema
- **NB** - Wraps are not to be used for patients with open wounds.
- Educate patient on their condition and ongoing treatment.

For maintenance garments refer to compression hosiery formulary

Review

At 4-weekly intervals (or more frequently, if concerned), monitor healing by:

Patients with wound(s):

- Complete ulcer assessment.
- Record digital image(s) and comparing with previous images.
- Review effectiveness of treatment plan and escalate if deteriorating or no progress towards healing.
- If <40% wound area reduction at 4 weeks, refer to Tissue Viability

Patients with oedema:

- Measure reduction in limb swelling.
- If limb is no longer reducing in size, measure for maintenance garment(s).
- If oedema management is unsuccessful, refer to Tissue Viability.

At 12 weeks:

- If wound remains unhealed, refer to Tissue Viability
- Complete comprehensive reassessment

Guidance 1 - Red flags for application of compression

If any red flags are present, immediately escalate to the relevant clinical specialist and/or service. Consider first-line mild graduated compression (20mmHg) in line with clinical assessment EXCEPT FOR THOSE PATIENTS WITH ACUTE OR SUSPECTED CHRONIC LIMB THREATENING ISCHAEMIA.

- Acute infection of leg or foot - treat infection, refer to local wound infection guidance
- Symptoms of sepsis - immediately escalate via 999
- Acute or chronic limb threatening ischaemia - refer urgently to Vascular via GP
- Suspected acute deep thrombosis (DVT) - urgent escalation to GP
- Suspected skin cancer - take photographs and urgent escalation to GP
- Bleeding varicose veins - urgent referral to Vascular via GP

Prior to referral, consider if patient is in the last few days of life and review RESPECT form.

Guidance 2 - Red flags for acute decompensated heart failure

DO NOT APPLY COMPRESSION

- Escalate to GP/Heart Failure Team
- Consideration: If no previous diagnosis of heart failure, but it is suspected (red flags present), refer to GP to request a NT pro BNP blood test (gold top) to rule out heart failure
- If leg is weeping use wadding and retention bandage
- Ensure regular leg elevation and sleeping in bed at night.
- Refer to Tissue Viability & GP/Heart Failure Team for ongoing management advice.
- Complete 2-week holistic vascular assessment but liaise with Tissue Viability and GP/Heart Failure Team prior to implementing compression.

Guidance 3 - 20mmHg compression options

- Jobst Ulcer Care hosiery liners
- Reduced compression bandage system - apply sub-bandage wadding and then measure ankle circumference:

Ankle circumference < 25cm:

- Apply K-Two Reduced (18-25cm)

Ankle circumference >25cm:

- Apply single layer Clinistretch (if oedema present or patient very active)
- Apply K-Two Reduced (25-32cm) (if no/mild oedema present or patient less active)

Guidance 4 - Wound management

- Do not use adhesive dressings on legs except for Kliniderm Foam Silicone Border and RespoSorb Silicone Border
- Dry necrosis with no autolysis must remain in situ to feet or lower legs if the patient has impiared arterial supply, unless advised by the Vascular team.
- Debridement can be complex. If you are unsure, contact Tissue Viability.
- Offer appropriate nutritional and lifestyle advice.
- Provide verbal and written advice about care.
- Discuss and incorporate opportunities for supported self-management

Guidance 5 - Staged approach to compression therapy starting with 20mmHg:

For single leg:

- Continue with 20mmHg below knee for 14 days.
- Reassess red flags for acute decompensated heart failure.
- If no red flags and assessment supports the use of strong 40mmHg compression, apply 40mmHg below knee.
- Reassess red flags for acute decompensated heart failure after 7 days.
- Once below knee compression successfully implemented, apply thigh high compression if required starting with mild 20mmHg and increasing to strong 40mmHg where assessment supports this, following the same staged approach.
- Implement an ongoing heart failure red flag assessment care plan for patient and reassess red flags for acute decompensated heart failure when compression is increased in either strength or length.

For bilateral legs:

- Continue with 20mmHg below knee on both legs for 14 days.
- Reassess red flags for acute decompensated heart failure.
- If no red flags, apply 40mmHg below knee to one leg and 20mmHg below knee to the other leg.
- Reassess red flags for acute decompensated heart failure after 7 days.
- If no red flags and assessment supports the use of strong compression, apply 40mmHg to both legs, below knee.
- Once below knee compression successfully implemented, apply thigh high compression if required starting with mild 20mmHg and increasing to strong 40mmHg where assessment supports this, following the same staged approach.
- Implement an ongoing heart failure red flag assessment care plan for patient and reassess red flags for acute decompensated heart failure when compression is increased in either strength or length.

National Wound Care Strategy Programme: Lower Limb Recommendations

Best Practice Statement: The use of compression therapy for peripheral oedema: considerations in people with heart failure

BLS/LSN: Guidelines on the Management of Cellulitis in Lymphoedema

Oxford Health Wound Care Formulary

References: National Wound Care Strategy Programme: (2023) Recommendations for Leg Ulcers. British Lymphology Society and Lymphoedema Support Network (2025) Guidelines on the Management of Cellulitis in Lymphoedema. South Central Antimicrobial Network (SCAN Guidelines). How to cite this document: Wounds UK (2023) Best Practice Statement: The use of compression therapy for peripheral oedema: considerations in people with heart failure. Wounds UK, London. Available to download from: www.wounds-uk.com.