




## Section 5: Leg Ulcers Bandaging Selection

### Introduction

Leg ulceration is common and prevalence increases with age. Approximately 1% of the population will suffer from leg ulceration at some point in their lives. Venous ulceration is the most common type of leg ulceration followed by arterio-venous ulceration and arterial ulceration. Accurate, holistic assessment of the ulcer including ankle brachial pressure index (ABPI) is the key to successful treatment and must be performed prior to the application of any compression therapy.

Patients with the following features should be referred to the appropriate specialist at an early stage of management: see [Section 15: Referral Pathways](#)

- Suspicion of malignancy
- Peripheral arterial disease (ABPI<0.8)
- Rheumatoid/vasculitis
- Suspected contact dermatitis or dermatitis resistant to topical steroids
- Diabetes mellitus
- Atypical distribution of ulcers
- Non healing ulcer

Type	Indicator/descriptor	Management aims	Treatment options
<b>Venous</b> 	<ul style="list-style-type: none"> <li>• Medial gaiter area</li> <li>• Usually superficial with poorly defined edges</li> <li>• May have signs of venous disease on the leg i.e. haemosiderin staining, venous dermatitis, atrophie blanche, oedema, varicose veins, lipodermatosclerosis i.e. ankle flare</li> <li>• ABPI &gt;0.8</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce pressure in superficial veins</li> <li>• Aid venous return</li> <li>• Reduce oedema</li> </ul>	<a href="#">Multi layer high compression bandaging (4 layer)</a> should be routinely used for the treatment of venous leg ulcers  <a href="#">Short stretch inelastic compression bandages</a>  Hosiery Kits  Elevation of limb and exercise are important
<b>Arterio-Venous</b> 	<ul style="list-style-type: none"> <li>• Involves both arterial and venous insufficiency</li> <li>• May have signs of venous disease</li> <li>• ABPI between 0.6 - 0.8</li> </ul>	<ul style="list-style-type: none"> <li>• Increase venous return (without compromising arterial perfusion)</li> <li>• Reduce pain and oedema</li> </ul>	Following specialist referral and under close supervision options may include:  <a href="#">Multi layer light compression bandaging (layers 1,2 and 4)</a>  <a href="#">Short stretch inelastic compression bandages</a>
<b>Arterial</b> 	<ul style="list-style-type: none"> <li>• Any part of leg, commonly below ankle</li> <li>• Often over bony prominence</li> <li>• Localised oedema</li> <li>• Rest pain</li> <li>• Punched out appearance</li> <li>• Pale ulcer base</li> <li>• ABPI &lt;0.6</li> </ul>	<ul style="list-style-type: none"> <li>• Warm, insulate and protect limb</li> <li>• Support joints</li> <li>• Maintain surface temperature</li> </ul>	Specialist referral for all patients.  Compression bandaging must <b>NEVER</b> be used on arterial leg ulcers.

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## Other considerations

- Latex free brands of compression bandages should be used routinely.
- Compression bandaging should only be applied by staff with appropriate training and in accordance with the manufacturer's instructions.
- Patients should be assessed for skin complications within 24-48 hours following initiation of compression.
- Recurrence of venous ulcers can be substantially reduced by continuous application of compression hosiery.
- Below knee graduated compression hosiery is recommended to prevent recurrence of venous leg ulcers. Patients should be offered the strongest compression which they can tolerate to prevent recurrence, with 2 pairs being supplied on a 6 monthly basis.
- Nutrition: There is evidence to demonstrate that adequate levels of protein, fat, carbohydrates, vitamins and trace elements are necessary in wound healing, especially in collagen formation and maturation.
- Pain control is an important factor in obtaining patient concordance to any treatment regime and a programme of pain management should be tailored to the needs of each individual patient.
- Associated dermatitis which has not responded to topical steroid therapy should be referred for patch testing with a specific series for leg ulcers.

## References:

1. SIGN Guideline 120: Management of Chronic Venous Leg Ulcers. August 2010 [Click here](#)
2. Best Practice Statement: Compression Hosiery [Click here](#)

## Further Reading

1. SIGN Guideline 89: Diagnosis and Management of Peripheral Arterial Disease. October 2006 [Click here](#)
2. QIS Vascular Services: Care of the Patient with Vascular Diseases. October 2003 [Click here](#)

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