

## **Swansea Bay University Health Board** **Varicose Vein Referral Guidelines**

### **1. Description of Service/Treatment**

- 1.1. Most patients with varicose veins can be managed in primary care. Varicose Veins do not confer excess risk of DVT<sup>1</sup>. The Guidelines herein provide graphical illustrates to assist the referrer assess the extent of the veins using a clinical classification of varicose veins, *ensuring appropriate referrals are made to secondary care.*

### **2. Commissioning Policy**

- 2.1. Unless an exceptional case is presented, the Health Board will not fund secondary care for the treatment of:
- Grade 0: Thread/Flare veins
  - Grade I: Minor/moderate varicose veins
  - Grade II: Moderate or symptomatic varicose vein
  - Grade III: Extensive or symptomatic varicose veins without complications of venous hypertension
- 2.2. The Health Board will fund specialist advice and treatment, including surgery if appropriate for the following:
- Grade IV: Severe signs of venous insufficiency
  - Grade V: Active leg ulceration
  - Episodes of bleeding directly from varicose veins

### **3. Monitoring Appropriateness of Referrals**

- 3.1. The Health Board has adopted a system for the triaging and monitoring of appropriate referrals in line with this guidance.

### **4. Varicose Vein – Referral Guidelines**

#### **4.1. Grade 0: Thread / Flare veins / Telangiectasia / Spider veins**



#### **Telangiectasia and Reticular Veins**

<sup>1</sup> Cambell B. Thrombosis, phlebitis and varicose veins. BMJ 1996;312:198

Telangiectasia are small red / blue venular flares. Reticular veins are easily visible small blue veins (less than 3mm diameter), not usually associated with truncal vein valvular incompetence

Telangiectasia, also known as spider veins and reticular veins may be unsightly but are of cosmetic concern only. Treatment is **not** available on the NHS and patients with such veins should **not** be referred to NHS vascular clinics.

#### 4.2. **Grade I: Minor / moderate varicose veins**

Truncal varicosities which may be associated with large vessel valvular incompetence but are asymptomatic.



#### **Grade I VV'S Thigh– LSV Incompetence**

#### **Grade I VV'S Calf – SSV incompetence**

Treatment for patients with grade I varicose veins is **not** available in secondary care on the NHS and they should **not** be referred to NHS vascular clinics.

#### 4.3. **Grade II: Moderate or symptomatic varicose veins**

This group includes patients with obvious varicose veins that remain asymptomatic and those with moderate veins that cause moderate symptoms such as pain, discomfort , heaviness, itching, mild oedema and aching.



Lifestyle advice and reassurance may be given and graduated compression hosiery are advised / prescribed. If symptomatic, they can be effectively managed with lifestyle advice and graduated compression hosiery.

**Mediven or Sigvaris European Class I, below knee or full length**, graduated compression hosiery depending on the distribution of the veins. Graduated compression hosiery to be worn daily. Check peripheral pulse status and history to exclude significant peripheral vascular disease. Emollient application such as Diprobase, E45 or equivalent is advised prior to applying the hosiery and after removal at night, to prevent the skin drying. Consider prescribing an application aid in the elderly, those with arthritis or infirm.

*If hosiery does not control symptoms or if they are not tolerated it is unlikely that the symptoms are due to varicose veins.*

Treatment for patients with grade II varicose veins is **not** available in secondary care on the NHS and they should **not** be referred to NHS vascular clinics.

#### 4.4. **Grade III: Extensive varicose veins without complications**



**Mediven or Sigvaris European Class II, below knee or full length**, depending on the distribution of the veins. Graduated compression hosiery to be worn daily. Check peripheral pulse status and history to exclude significant peripheral vascular disease. Emollient application such as Diprobase, E45 or equivalent is advised prior to applying the hosiery and after removal at night, to prevent the skin drying. Consider prescribing an application aid in the elderly, those with arthritis or infirm.

*If hosiery does not control symptoms or if they are not tolerated it is unlikely that the symptoms are due to varicose veins.*

Treatment for patients with grade III varicose veins is **not** available in secondary care on the NHS and they should **not** be referred to NHS vascular clinics.

#### 4.5. **Grade IV: Severe signs of venous insufficiency**

This group includes patients with healed varicose ulcers, inflamed lipodermatosclerosis (brown staining, thickened skin, redness, pre-ulceration), infected varicose eczema and severe extensive thrombophlebitis. Initial management may include compression hosiery, anti-inflammatory drugs and antibiotics as appropriate and should commence in primary care.



Referral to secondary care is appropriate for this group of patients **with objective evidence of complications from venous hypertension** including:

- Significant pitting oedema
- Brown skin pigmentation (haemosiderosis)
- Episodes of varicose eczema
- **Two episodes** of obvious thrombophlebitis without subsequent improvement in their varicose veins should also be referred for assessment.

Prompt referral is recommended and these patients should be given clinical priority in vascular clinics. Severe thrombophlebitis may be associated with DVT – if DVT is considered, then immediate referral via the DVT pathway is advised, as well as referral for a vascular outpatient assessment. The vascular service is not a DVT service.

#### 4.6. **Grade V: Active leg ulceration**



## Grade V: Active leg ulceration (cont'd)

Patients developing obvious venous ulceration should be referred simultaneously to the **vascular service on an urgent basis** and to the specialist community ulcer clinics. Venous ulcers typically occur over the medical malleolus, in the gaiter region, associated with the skin changes of chronic venous hypertension. Pulses are usually present.

Patients who develop leg ulcers should also be seen in specialist community-based ulcer clinics where arterial disease can be excluded. Patients with venous ulcers, without arterial disease can be treated by four layer bandaging or equivalent.

**Early specialist vascular assessment is now considered appropriate, as recent evidence has shown that early treatment of underlying venous hypertension can shorten the duration of the ulcer<sup>2</sup>** This benefit has been confirmed by longer term data and appears to be **cost** effective study<sup>3</sup>.

### **Active bleeding from varicose veins**

Bleeding is most often from a minor venule, close to the skin surface, with the potential for significant bleeding if associated with increased venous pressure. The first aid treatment is elevation and application of pressure. A dressing should be applied and secured with a bandage and referral to the vascular service according to clinical urgency. Treatment is usually simple compression followed by injection sclerotherapy or thermal ablation as required.

### **PRIOR TO REFERRAL**

#### **Prior to referral:**

- **Please ensure that the patient meets the referral criteria**
- **Check circulation status i.e. foot pulses and if satisfactory, prescribe Mediven or Sigvaris class I or II compression hosiery as per the guidelines**
- **Re-enforce the importance of wearing stockings daily**

**These actions will ensure we can assess the effect of the compression on complications and symptoms.**

- Patient compliance is a marker of whether they can tolerate the use of hosiery for prolonged periods, as **this is a requirement if treatment such as foam sclerotherapy, endothermal ablation or open surgery.**

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<sup>2</sup> Gohel MS, Heatley F, Liu X, et al; EVRA Trial Investigators. A randomized trial of early endovenous ablation in venous ulceration. N Engl J Med. 2018;378(22):2105-2114. doi:10.1056/NEJMoa1801214

<sup>3</sup> Gohel MS, Mora, MSc J, Szigeti M, et al. Long-term Clinical and Cost-effectiveness of Early Endovenous Ablation in Venous Ulceration: A Randomized Clinical Trial. JAMA Surg. 2020;155(12):1113-1121. doi:10.1001/jamasurg.2020.3845

#### 4.7. Appendix to varicose vein referral guidelines

Telangiectasia, reticular veins, spider veins are understandably a cause of significant cosmetic concern and sufferers may seek advice on treatment outside the NHS. The most effective treatment remains microinjection sclerotherapy for most, though pulsed light therapy is effective for very small red telangiectasia. Laser and microwave do not appear to be as successful and electrolysis is ineffective on leg veins.

Patients with varicose veins not eligible for NHS surgical intervention may seek treatment elsewhere or be managed conservatively:

**Lifestyle advice** may include weight loss, encouraging exercise and leg elevation on resting.

**Reassurance** can be given that unless severe symptoms or signs of venous insufficiency are present then serious complications such as leg ulceration are very unlikely in the short to medium term. Should the clinical situation change then referral is obviously possible.

**DVT risk** is not significantly increased by uncomplicated varicose veins but precautions when flying, including compression hosiery, aspirin, avoiding dehydration and regular exercise would seem sensible.

**Graduated compression hosiery** control most symptoms attributable to varicose veins, including aching and ankle swelling in addition to reducing the risk of ulceration.

**Hosiery are available on FP10 and we advise prescribing Mediven or Sigvaris hosiery – flat knit, European Class I or European Class II.** Hosiery size is measured by practice nurses or pharmacists and guidance is available on the manufacturers website or [www.daylong.co.uk](http://www.daylong.co.uk).

The patient may wish to purchase a selection of more fashionable hosiery if desired from pharmacies or [www.daylong.co.uk](http://www.daylong.co.uk).

Class I hosiery are suitable for mild to moderate symptoms and for mild oedema, however significant ankle oedema or prevention of ulcer recurrence requires a higher class of stocking e.g. Class II, III or above.

Below knee hosiery are usually effective but some patients find them uncomfortable or ineffective if varicosities are in the thigh. Thigh-length hosiery may be prescribed. High quality hosiery have a silicon band at the upper thigh for support. Some patients report difficulty keeping them up. Suspender belts are effective, as are belted hosiery and tights, however they are not necessarily available on FP10.

The choice of open or closed toe hosiery is a matter of patient choice and practicality. Some application sock devices only work with open toed hosiery.

***For patients who fall outside of the standard sizes custom fit hosiery is available via the Lymphoedema Service who will measure and advise.***

**We advise against the use of Scholl hosiery as they do not provide adequate compression and the upper portion of the above knee hosiery do not stay up.**

**Varicose eczema** may require emollients and topical steroids are effective if severe or inflamed.

**Thrombophlebitis** usually responds to leg elevation, topical or systemic NSAID's and hosiery. Antibiotics are occasionally required for secondary infection.

**Conventional surgical intervention** for varicose veins is becoming less commonplace, and is the third option to be offered after thermal ablation and foam sclerotherapy. Surgical intervention involves removing the varicosities (phlebectomies or avulsions) combined with removing their cause – valvular incompetence. This commonly requires long saphenous vein (LSV) stripping, short saphenous vein ligation or perforator ligation. Specialists, performing large numbers of these procedures using modern techniques ensures that they are performed with reduced morbidity / invasiveness and an acceptably low complication and recurrence rate. Pre-operative evaluation using combined Doppler and ultrasound (Duplex) scanners ensures that the correct operation is performed

**New Treatments for varicose veins** have received much publicity lately, including Venefit Closure radiofrequency ablation of the LSV, Endovenous Laser Ablation of the LSV and Ultrasound –Guided Foam Sclerotherapy. All are now NICE-approved. The first two therapies rely on heat to treat the veins. The use of cyanoacrylate glue has been approved by NICE, however due to reports of complications and the change of item from drug to implantable device and excessive cost, leads the local specialists reserve judgement on its future adoption.

### **Thermal Ablation of varicose veins**

Thermal ablation of the incompetent main truncal veins (long or short saphenous systems) is a minimally invasive way of treating the vein, with the patient returning to normal activity quickly. Residual veins may occur, however the reduction of venous pressure in the tissues prevents progression to pigmentation and ulceration. Residual veins are not usually symptomatic, however when they are they can be successfully treated by injection sclerotherapy (see below). There are further advances ongoing on how to produce heat, including steam generation – outcome data is awaited.

- **Radiofrequency Ablation (Venefit)** is a minimally invasive alternative to LSV stripping and has obtained NICE approval. Varicose veins feeding into the LSV may shrivel postoperatively or may require subsequent sclerotherapy It is expensive, however it is available on the NHS locally for appropriate cases.
- **Endovenous Laser** allows outpatient LSV ablation under local anaesthetic. Varicose veins feeding into the LSV may shrivel postoperatively or may require subsequent sclerotherapy. This is not currently available on the NHS as the

outcomes are associated with increased pain and post operative morbidity than Radiofrequency Ablation.

### **Chemical ablation of varicose veins**

This involves injection of a sclerosing agent mixed with air, injected into the vein under ultrasound control, to chemically injure the lining of the vein, and combined with compression achieves long term occlusion of the truncal veins. The complications of the procedure include pigmentation, phlebitis, ulceration, haematoma (that may require aspiration/evacuation).

**Ultrasound Foam Sclerotherapy** allows outpatient obliteration of the truncal veins (e.g.: LSV, SSV) and varicosities. More than one session may be required.

### **New technologies:**

Combination of chemical and mechanical ablation of truncal veins is under development, including injection of cyanoacrylate glue. These have the advantage of treating the patient in the outpatient setting, claiming fewer cases of thrombophlebitis and pigmentation, and do not utilise theatre facilities. NICE appraisal is awaited, if they obtain approval we will incorporate them into the system, as a means of decreasing cost per Quality Adjusted Life Year (QALY).

Both these techniques have potential advantages of reduced morbidity and cost compared to conventional surgery but none of these interventions are without disadvantages and patient selection by a specialist with a working knowledge of all alternatives is crucial. Endovenous laser, ultrasound-guided foam sclerotherapy and minimally- invasive conventional day-case surgery are all available in ABMU Health Board.

## **5. Exceptions to this Policy**

5.1. Commissioning, by its very nature, focuses on the high level. However, ABMU Health Board recognises that every patient is an individual and that there may be particular circumstances which give grounds for funding treatment in an individual case contrary to the decision not to fund in general.

5.2. To receive exceptional funding, a clinical advocate for the patient needs to be able to demonstrate that:

- The patient is significantly different to the general population of patients with the condition in question;

And

- The patient is likely to gain significantly more benefit from the intervention that might be normally expected for patients with that condition.

In order to apply for funding an application needs to be submitted to the Individual Patient Planning Co-ordinator at ABMU Health Board Headquarters, 1 Talbot Gateway, Port Talbot, SA12 7BR



## REMINDER

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