Diagnosis and management of varicose veins in the legs

NICE guideline

The National Institute for Health and Care Excellence has published new guidance on the diagnosis and management of varicose veins in the legs. The guideline is short but is likely to mark a change in how varicose veins are managed in general practice, and makes recommendations on information for people with varicose veins, criteria for referral, and treatments and management in pregnancy. The guideline uses the Clinical Etiological Anatomical Pathophysiological (CEAP) classification of varicose veins (Box 1), which includes information on the clinical severity, aetiology, anatomical location, and pathophysiology of varicose veins and was originally intended for research purposes. Although accepted internationally and used in clinical practice it does have some limitations and is not used as the basis of referral criteria in the guideline. The Guideline Development Group agreed that it was more important for those referring to a vascular service to use clear, key clinical indicators and listen to the patient rather than trying to categorise people using CEAP.

GUIDANCE

The guideline defines symptomatic varicose veins as those found in association with troublesome lower limb symptoms thought to be due to the effects of superficial venous reflux, and for which no other more likely cause is apparent. The troublesome lower limb symptoms are typically pain, aching, discomfort, swelling, heaviness, and itching. The evidence reviewed for the guideline indicated that many people with varicose veins overestimated the likelihood of complications, so that exploration of ideas and concerns individuals may have is worthwhile. Healthcare professionals should discuss what varicose veins are, their possible causes and the likelihood of progression and complications (including deep vein thrombosis, skin changes, leg ulcers, bleeding, and thrombophlebitis). The guideline quotes evidence on the lifetime prevalence of varicose veins which estimates that approximately 3–6% of people who have varicose veins in their lifetime will develop venous ulcers.

People with varicose veins should be given advice on the benefits of weight loss, and the avoidance, if possible, of factors that make their symptoms worse. Light to moderate physical activity does not need to be avoided but strenuous exercise might make varicose veins worse. The situations when further medical help should be sought should also be discussed.

The guideline is clear that compression hosiery is not an effective treatment for varicose veins. It may help with some symptoms but should not be used unless interventional treatment is unsuitable.

REFERRAL

People with bleeding varicose veins should be referred immediately to a vascular service. Bleeding varicose veins constitute a medical emergency and front-line staff including doctors, nurses, and receptionists need to be aware of this and act accordingly.

While people with asymptomatic varicose veins do not need referral, people should be referred to a vascular service if they have any of the following:

- symptomatic primary or symptomatic recurrent varicose veins;

**Box 1. CEAP classification**

<table>
<thead>
<tr>
<th>CEAP</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>C0</td>
<td>No visible or palpable signs of venous disease</td>
</tr>
<tr>
<td>C1</td>
<td>Telangiectasias or reticular veins</td>
</tr>
<tr>
<td>C2</td>
<td>Varicose veins; diameter &gt;3mm</td>
</tr>
<tr>
<td>C3</td>
<td>Oedema</td>
</tr>
<tr>
<td>C4</td>
<td>Changes in skin and subcutaneous tissue: pigmentation, eczema, lipodermatosclerosis or atrophie blanche</td>
</tr>
<tr>
<td>C5</td>
<td>Healed venous ulcer</td>
</tr>
<tr>
<td>C6</td>
<td>Active venous ulcer</td>
</tr>
</tbody>
</table>
lower-limb skin changes, such as pigmentation or eczema, thought to be caused by chronic venous insufficiency;
- superficial vein thrombosis (characterised by the appearance of hard, painful veins) and suspected venous incompetence;
- a venous leg ulcer (a break in the skin below the knee that has not healed within 2 weeks); or
- a healed venous leg ulcer.

The guideline is specific about what it regards as a vascular service. It suggests that this is a team of healthcare professionals who have the skills to undertake a full clinical and duplex Doppler ultrasound assessment and are able to provide a full range of treatments, which should include endothermal ablation, sclerotherapy and surgical treatments. A duplex Doppler ultrasound establishes a sound anatomical basis for treatment.

**TREATMENT**

On the basis of cost effectiveness the guideline recommends that people with confirmed varicose veins and truncal reflux should first be offered endothermal ablation or endovenous laser treatment of the long saphenous vein, then ultrasound-guided foam sclerotherapy or surgery, in that order. All of these treatments are very cost effective. Compression bandaging or hosiery for use after interventional treatment should not be used for longer than 7 days.

People considering treatment for varicose veins should be told that new varicose veins may develop after treatment, that they may need more than one session of treatment and that the chance of recurrence after treatment for recurrent varicose veins is higher than for primary varicose veins.

**MANAGEMENT DURING PREGNANCY**

The guideline makes separate recommendations for management of varicose veins during pregnancy.

Interventional treatment for varicose veins during pregnancy should only be carried out in exceptional circumstances but compression hosiery may have a role for relief of leg swelling associated with varicose veins during pregnancy.

**COMMENT**

The main change in clinical practice in this guidance is to recommend referral of all patients with symptomatic varicose veins on grounds of clinical and cost effectiveness. Many GPs may not be aware of just how acceptable modern minimally invasive endovenous treatments have become. This guidance will pose a challenge to GPs and to clinical commissioning groups when considering the commissioning of vascular services. The Royal College of Surgeons have developed guidelines for the commissioning of services for the management of varicose veins.3

**Provenance**

Commissioned; not externally peer reviewed.

**Competing interests**

The authors have declared no competing interests.

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**REFERENCES**