



A vascular update – what's new in superficial and deep venous disease.

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Varicose veins – recent guidelines from NICE

The management of varicose disease has changed radically over the past decade with the development of new endovenous treatments, including radiofrequency or laser ablation (Figure 1), and non-thermal techniques such as foam sclerotherapy or bioadhesive glue. All of these aim to close the incompetent saphenous vein, which pressurises varicosities or ulcerated skin. Unlike surgical stripping, these techniques can be performed in a treatment room under local anaesthetic, allowing immediate discharge and a short recovery period. Comparative studies have shown that the endovenous procedures are associated with less pain and bruising than surgery, and are accompanied by much lower rates of recurrence.

In July 2013 the health advisory body NICE issued the following recommendations for the management of venous disease (summary in BMJ 2013;347:f4279):

- i) all patients with symptomatic varicose veins should be referred to a vascular service in order to benefit from accurate assessment and duplex scanning, specialist advice and a cost-effective treatment strategy. Patients with bleeding veins, superficial thrombosis or ulceration should be referred urgently.
- ii) compression stockings are poorly tolerated (20% compliance), provide only marginal symptom relief and are more costly than intervention in the long-term. They should only be prescribed if patients are unsuitable for intervention, unwilling or pregnant.
- iii) endovenous ablation using either laser or radiofrequency is the most cost-effective intervention of all treatments, so surgical stripping should only be performed if the venous anatomy is unsuitable for a catheter procedure.

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In our experience of treating over 3000 patients, we have found it possible to treat most varicose veins using a combination of endovenous ablation, foam sclerotherapy and microavulsions under ultrasound control. This avoids the potential complications from redo groin or popliteal surgery.

Venous ulceration – the role of endovenous therapy

Superficial or deep venous disease is responsible for up to 70% of chronic leg ulcers, a condition which accounts for approximately 1% of NHS expenditure. Although surgical correction of venous disease has been shown to accelerate ulcer healing, the patients are often elderly and have risk factors such as immobility, previous DVT, obesity or cardiorespiratory disease. This renders them unsuitable for general anaesthetic. These patients are often treated by compression bandaging for months or years, and then lifelong stockings to prevent recurrence.

There is increasing evidence that patients with venous ulcers and severe comorbidity can be successfully treated by endovenous techniques under local anaesthetic with low complication rates, achieving tissue healing as well as freedom from stockings afterwards.

A randomized study, EVRA, is currently evaluating this further but at Parkside Hospital endovenous therapy is routinely offered for ulceration.



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Deep venous thrombosis – reducing the risk of recurrent episodes

Deep vein thrombosis (DVT) is a common disease affecting 1 in 1000 people per annum. Up to 40% of patients who have an unprovoked DVT (ie those with no identifiable risk factors) have recurrent thrombosis within 10 years. The following clinical features appear to confer a higher risk of recurrent thrombosis once initial anticoagulation has ceased:

- i) the presence of residual thrombosis on duplex ultrasound.
- ii) a persistently high D-dimer level.
- iii) the presence of a mechanical stenosis due to entrapment of the left common iliac vein between the artery and vertebra (May-Thurner syndrome), which increases the risk of thrombosis tenfold.

For these reasons we advocate venous duplex imaging of the leg and pelvis, and D-dimer assay, in younger patients who present with an unprovoked DVT once they have finished anticoagulation. If they are found to be at high-risk then a longer period of anticoagulation seems justified. Aspirin may be a suitable alternative to warfarin as it reduces the risk of recurrent thrombosis by up to 30%, with a lower risk of major haemorrhage. If an iliac vein stenosis is discovered it may be appropriate to refer to a specialist unit for venous stenting (Figure 2).

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Summary

Endovenous or “keyhole” procedures are now available for patients with either superficial or deep venous problems, allowing early mobilization and a quick return to full activity.

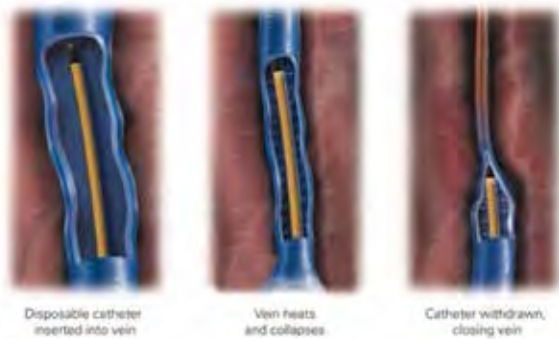


Figure 1. Radiofrequency closure of saphenous vein

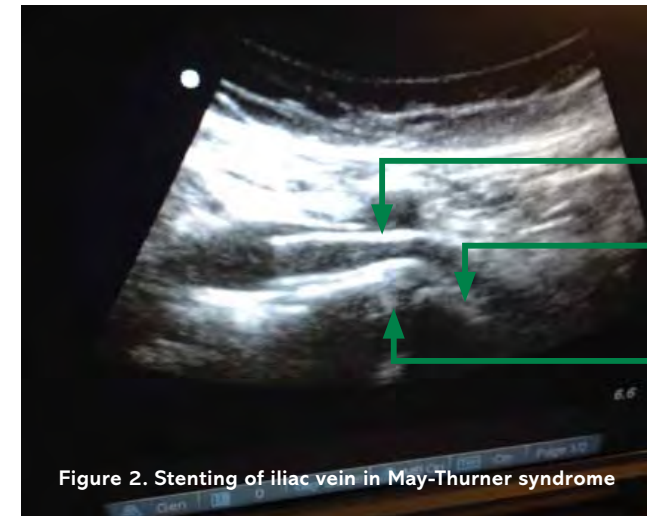


Figure 2. Stenting of iliac vein in May-Thurner syndrome