EDITORIAL

Varicose Veins: Highlighting the Confusion over How and Where to Treat

Varicose veins affect up to a third of the adult population in Western countries and around 90,000 varicose vein operations are performed annually in England. Patients may present for numerous reasons, ranging from aesthetic concerns to severe pain and ulceration. The significant impact on patient quality of life and health service expense is beyond dispute, particularly for patients with chronic venous hypertension and ulceration. The CEAP classification (clinical, etiologic, anatomic, pathophysiological) can be used to classify the severity of venous disease, and is utilised by some to decide which patients should be offered treatment. There is an unequivocal body of evidence demonstrating that treatment of varicose veins results in clinical and quality of life benefits for patients in all CEAP categories. The quality of life benefits from varicose vein surgery have been shown to match those from elective laparoscopic cholecystectomy.

Once a patient has been deemed suitable for treatment, a plethora of treatment modalities may be offered depending on the clinician or hospital receiving the referral. For patients with greater or lesser saphenous vein incompetence, standard varicose vein surgery usually involves flush disconnection and stripping of the refluxing vein and avulsion of the prominent varicosities. This 'traditional' treatment is supported by decades of evidence and may be considered the 'gold standard' for varicose vein treatment. However, complications such as wound infection, bruising and varicose vein recurrence due to technically inadequate surgery or neovascularisation have been widely reported. The demand for smaller scars, fewer complications and faster return to work has inspired a number of new treatment options for varicose veins.

Modern, minimally invasive treatment options include foam sclerotherapy and venous ablation with radiofrequency energy or laser. Foam sclerotherapy offers the least invasive option as cannulation of the vein to be treated represents the most painful part of the procedure. Foam is then injected into the vein resulting in a localised chemical thrombophlebitis and subsequent occlusion. Both laser and radiofrequency ablation involve placement of an energy delivering catheter in the vein to be treated after infiltration of tumescent anaesthesia. The intended result is closure of the venous channel. Patients with tortuous, superficial or very small veins may be considered unsuitable for endovenous ablation.

Each modality has enthusiastic advocates and promising early results. However, reports of serious adverse events including scotoma or stroke after foam sclerotherapy and skin burns after laser/radiofrequency ablation have been a cause of unease, particularly as the true incidence of these and other complications remains unknown. With each endovenous modality, treatment may be performed under local anaesthesia in the setting of a clinic room. This approach is likely to offer considerable financial and logistic advantages and has been widely publicised, but may involve multiple treatment sessions. Many clinicians offering the new techniques prefer to perform procedures under general anaesthesia in the operating theatre in order to easily treat multiple veins and perform avulsions. Whether patients prefer a 'one-stop' treatment under general anaesthesia or multiple treatments under local anaesthesia in an 'office' environment remains unknown.

The introduction of new less invasive treatments for venous disease is undoubtedly welcome, but new choices have added new confusion. The inevitable introduction of further endovenous techniques in the future is likely to add to the uncertainty. Unfortunately, there are few studies directly comparing the different techniques, reporting long term outcomes or evaluating cost effectiveness. Indeed, in many cases a combination of surgical and endovenous treatments may be offered, making it increasingly difficult to ascertain the efficacy of treatment components. It is likely that optimum venous treatment may involve a combination of interventional techniques tailored to the individual patient, and those involved in the treatment of venous disease should be able to offer a range of treatment modalities.

After nearly a century of consistency, the treatment of patients with venous disease is evolving rapidly. Clinicians and researchers have a responsibility to continue reporting...
long term clinical, quality of life and health economic data from well conducted prospective studies to help clarify the benefits and risks of the wide range of venous interventions currently available.

Conflicts of Interest

None to declare.

References


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