Management of varicose veins: a survey of current practice by members of the Vascular Society of Great Britain and Ireland

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ABSTRACT

INTRODUCTION In 1999, a survey was published detailing the management of varicose veins by members of the then Vascular Surgical Society (VSS). Since then, newer methods for treating varicose veins have been developed and far more explicit rationing has been introduced in the NHS.

SUBJECTS AND METHODS In order to examine whether there had been a significant change in established practice in the UK, a questionnaire was sent to all Vascular Society of Great Britain and Ireland (VSGBI) members in the 2004 yearbook by E-mail or post.

RESULTS Of the 426 questionnaires distributed, a 69% response rate was achieved. Of respondents, 97% treated varicose veins in their NHS practice, whilst 88% did so in private practice. Some 73% used hand-held Doppler assessment in the clinic and 96% used duplex ultrasound assessment selectively. Despite UK National Institute for Health and Clinical Excellence (NICE) guidelines, only 68% said that their primary care trusts funded treatment of symptomatic varicose veins, while 93% did so for complications. In either NHS or private practice, respectively, 83% or 72% of responders offered surgery as preferred treatment for primary varicose veins, while 14% or 20% preferred endovascular treatments (endovascular laser treatment, radiofrequency ablation and foam sclerotherapy). Of responders, 17% did not follow-up patients after treatment.

CONCLUSIONS This survey suggests that there is rationing of access to care for symptomatic varicose veins. Despite publicity for endovenous techniques, surgery remains the preferred treatment for varicose veins in the UK.

KEYWORDS

Varicose veins – Management – Survey

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In 1999, a survey was performed detailing how members of the then Vascular Surgical Society (VSS) managed varicose veins.¹ Since then, a number of significant changes have occurred which may have influenced surgical practice. For example, there has been the introduction of more explicit rationing within the NHS in relation to the management of venous disease. This has influenced referral patterns and workload.² Also, newer methods of treating varicose veins have been developed and actively promoted in the literature.³ These consist of endovascular techniques such as endovascular laser treatment (EVLV), foam sclerotherapy and radiofrequency ablation (VNUS). However, the effect of these changes on surgical practice has not previously been assessed. The aim of this study was to repeat the survey to determine whether there has been a significant change in the management of varicose veins in the UK.

Subjects and Methods

A 34-question survey was designed, based upon the original questionnaire. In 2006, this was distributed to all 427 ordinary members of the Vascular Society of Great Britain and Ireland (VSGBI) listed in the 2004 yearbook. Members who had provided an E-mail address were invited to complete the questionnaire electronically using survey software (<www.surveymonkey.com>). Non-responders and those who had not provided an E-mail address were subsequently sent a paper version by post.

Results

Demographics

Replies were received from 294 members, 151 by post and 143 electronically, giving an overall response rate of 69%.

Table 1 The provision of information for patients in the out-patient clinic (more than one format of communication could be chosen)

	Verbal (%)	Written (%)	Electronic (%)
Treatment options available	70	53	9
Specific treatment details	66	62	9
Potential complications	65	65	8

Four members actively refused to complete the questionnaire as they felt that they could not make generalised statements about their practice as it was tailored to individual patients. Of respondents, 44% described their practice as pure vascular surgery, whilst 51% practice vascular and general surgery. This is a marked change from 1999, when the figures were 21% and 77%, respectively. Of responders, 97% treated varicose veins in their NHS practice, whilst 88% did so in their private practice. Seven (2.4%) responders only treat varicose veins privately, but not in the NHS.

Out-patient clinics and investigations

Of respondents, 87% saw patients with varicose veins in either dedicated venous or vascular clinics, with 60% of surgeons seeing a median of 100–150 patients (range, 50–150) per year. Members were asked how they provided information for patients regarding options of treatments available, the specific details of one treatment and the potential risks and complications. The majority of respondents used a mix of verbal and written information with less than 10% providing details of websites that patients could access in their own time (Table 1).

There has been a rise in the number of surgeons using hand-held Doppler in the out-patient clinic setting from 65% to 73%, with duplex scanning now being the first-line of investigation for 96% of respondents. The most common indication for duplex scanning is recurrence and suspected deep venous disease, although 26% of respondents use it for all patients with varicose veins.

Treatment

A minority of respondents claimed that their primary care trusts still permitted treatment of varicose veins for cosmetic indications with over 90% being allowed to manage complicated varicose veins (Fig. 1). Of all respondents, only 68% indicated that their primary care trusts are currently funding the treatment of symptomatic varicose veins.

Of responders, 60% treat between 50–150 patients per year in their NHS practice, with 11% treating over 200 patients per year.

Figure 1 Percentage of respondents permitted to treat varicose veins for different indications by primary care trusts.

Only 54% of respondents offer the same range of treatment in their NHS and private practice. This is mainly due to restrictions in their NHS practice such as the lack of facilities/equipment (47%), cost (40%), primary care trust restrictions (35%) and time constraints (16%).

Members were asked to rank their preferred treatment options in both their NHS and private practice (Figs 2 and 3). For both, primary and recurrent varicose vein surgery is still the preferred treatment option, with endovascular treatments accounting for 24% or less of preferences.

On analysing these figures further, EVLT is the most preferred treatment option for primary varicose veins, foam sclerotherapy being so for recurrent veins. VNUS is the least preferred treatment option, especially in the NHS, where it accounted for less than 2% of the preferences.

Figure 2 Preferred modality of treatment for primary varicose veins in both NHS and private practice.

Surgery

Within their NHS practice, 35% of responders have a dedicated varicose vein operating list. Some 78% were allowed to give waiting-list priority to patients with skin damage or venous ulcers, with only 50% routinely operating on patients with open ulcers.

Compared to the original study, there has been a marked decrease in the number of surgeons offering other surgical options, with only 24% and 25% offering open and endoscopic subfascial perforator ligation, respectively, compared to 49% and 31% in 1999. Only 5% of responding surgeons perform deep venous reconstruction surgery.

Regarding the risk of thrombo-embolism, 45% of surgeons do not stop any hormone therapy in female patients and 25% or less stop hormone replacement therapy, all oral contraceptive pills or oestrogen-containing pills only. Of

responders, 70% used deep vein thrombosis prophylaxis prior to venous surgery, with 80% using a low-molecular weight heparin and 20% unfractionated heparin. This is a reversal of the figures in 1999 when 62% of responders used heparin and 71% used unfractionated heparin.

Bandages and stockings

The majority of surgeons used bandages postoperatively, with just 18% using an elastic stocking. Many responders (46%) used an elastic bandage, with 29% using a non-elastic bandage and 6% a 'Tubigrip'. The time these were left on varied from 6 h to 3 months and 77% go on to replace bandages with stockings, which are also worn for a variable length of time.

Follow-up

Whereas, in 1999, 51% of surgeons routinely followed up their patients in clinic only 29% do so now, with 17% not seeing them at all. The remainder see patients selectively (Table 2).

Discussion

This survey shows that there have been some significant changes in the practice of vascular surgery, specifically in the management of varicose veins in the last 7 years. However, it is not fully comprehensive. The 69% response rate is comparable to the 65% response rate of the original study;¹ however, as with any such survey, the practice of non-responders is unknown. In addition, there are probably a significant number of individuals who manage varicose veins in the UK who are not members of the VSGBI. This includes both non-vascular surgeons and radiologists or dermatologists who may be performing the less surgical treatments, such as sclerotherapy.

The management of varicose veins accounts for the greatest number of medicolegal claims against vascular surgeons.⁴ It is, therefore, of concern that 70% or less of responders provide verbal information about options of treatment available, details of specific treatments and potential risks and complications. The UK General Medical Council are currently consulting on draft guidelines on consent.⁵ This document specifically states that, in gaining informed consent, information about each of these three areas should be covered. Some 65% or less of responders provided written information for patients, even though this is not a requirement of gaining informed consent and, indeed, has been shown in vascular surgery not to improve patients' understanding of procedural risks and complications.⁶ For many surgeons, it may be a way of providing patients with the same information in more than one format to ensure understanding and also allow patients to have something to refer to at a later day.

Table 2 Indications given for selective follow-up

Reason for follow up	Percentage of responders
Audit	43
Research	10
Ulcer healing	41
Other	28

The 'other' reasons given include training purposes, to assess if further treatment is necessary, or only for certain treatments or clinical indications.

In 2001, the UK National Institute for Health and Clinical Excellence (NICE) introduced guidelines regarding treatment of varicose veins in the NHS. These stated that priority for treatment should only be given to patients with either severe symptoms or complications due to varicose veins. It is interesting to note that 20% of responding surgeons are still permitted by their primary care trust to treat cosmetic varicose veins, with only 90% being allowed to treat complicated veins. Previous work in a single unit has demonstrated that these guidelines have significantly impacted upon the amount of work being performed² but no work has been published regarding enforcement of, and adherence to, these guidelines. Interestingly, the Harris study² interpreted the finding that 55% of VSS members would operate on varicose veins for cosmetic reasons alone, as meaning that 45% were imposing some form of rationing. Our study suggests that, although rationing by the introduction of NICE guidelines has had an impact on the management of varicose veins, the guidelines are not being strictly adhered to. Overall, the data show that, in the UK, there is currently a postcode lottery as to whether uncomplicated varicose veins can be treated in the NHS. Given that there is good evidence that quality of life is improved following treatment of varicose veins⁷ and, if left untreated, they can lead to complications such as leg ulcers,⁸ it is of concern that the management of varicose veins seems to be largely driven by financial restrictions, rather than good clinical evidence.

This rationing also contributes significantly to the differing practice in NHS and private practice noted by 54% of responders. Most surgeons quote financial restrictions in the NHS as the reason for not managing patients in both sectors equally. However, in many cases, it was as much

about the indications for treatment as the range of treatments offered. Indeed, it is interesting to note that the figures for the use of endovascular techniques are fairly similar in both NHS and private practice, which would suggest that the uptake of these newer techniques is not being limited just by financial constraints. This may represent a caution amongst surgeons, resisting new techniques until good evidence is provided regarding safety and long-term outcomes.

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