www.Accurate information for varicose vein patients.com?

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ABSTRACT

INTRODUCTION The aim of this study was to review the information available to the public regarding the treatment of varicose veins on dedicated UK-based websites.

PATIENTS AND METHODS Websites were identified by using the Google® search engine. All identified websites were examined, noting the range of treatments explained and their stated potential complications. Website ownership was also recorded.

RESULTS A total of 49 websites were identified, belonging to individual physicians (21), private clinics or groups (15), national institutions (4) and device/drug manufacturers (4). Five websites were simply redirecting portals and, hence, were excluded from further analysis. Treatment methods discussed were conventional surgery (32), endovenous laser [EVLA] and/or radiofrequency ablation [RFA] (31), and ultrasound-guided foam sclerotherapy [UGFS] (27). Only 19 websites (43%) discussed all treatment methods. Complications mentioned following surgery were: cutaneous nerve damage (56%), recurrence (56%), infection (53%), bleeding (41%) and venous thrombo-embolism (38%). Complications following EVLA/RFA were: cutaneous nerve damage (42%), recurrence (42%), venous thrombo-embolism (39%) and burns (35%). Complications following UGFS were: pigmentation (59%), venous thrombo-embolism (48%), ulceration (41%), recurrence (41%), allergy (26%) and visual disturbance (26%).

CONCLUSIONS Over 50% of the websites examined did not mention all the management methods now available for varicose veins. More importantly, the majority of the websites did not warn of the common complications of intervention. Currently, information on the Internet cannot be relied upon to supplement informed consent and may actually generate unrealistic patient expectations.

KEYWORDS

Endovenous ablation – Complication – Varicose veins – Internet

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Endovenous techniques have become established as an alternative to surgery with stripping for the treatment of varicose veins.^{1–3} These include endovenous laser ablation (EVLA), radiofrequency ablation (RFA) and ultrasound-guided foam sclerotherapy (UGFS). In the UK, over a third of the members of the Vascular Society now offer at least one of these techniques in addition to surgery, although this is more likely to be within the private sector than with in the National Health Service (NHS).⁴

Patients contemplating treatment frequently seek information available from the Internet,⁵ which is playing an increasingly important role in determining their choices. The aim of this study was to review the information available

to the public regarding the treatment of varicose veins on dedicated websites.

Patients and Methods

An Internet search was conducted using the Google® search engine in December 2006. The search term used was ‘varicose veins’ and the search was limited to UK-based web pages. This identified over 400,000 pages of results. It was considered that potential patients were unlikely to search all of these and 49 different websites that consistently appeared at the top of the list were examined further. All of these websites were studied by three independent

Table 1 Percentage of UK-based varicose vein websites warning of specific complications following the treatment of varicose veins

Complication	Surgery (n = 32)	EVLA/RFA (n = 31)	UGFS (n = 27)
Cutaneous nerve injury	56%	42%	–
Venous thrombo-embolism	38%	39%	48%
Recurrence	56%	42%	41%
Infection	53%	–	–
Bleeding/haematoma	41%	–	–
Bruising	59%	42%	–
Thrombophlebitis	–	23%	48%
Pigmentation	–	13%	59%
Ulceration	–	–	41%
Burns	–	35%	–
Visual disturbance*	–	–	26%
Allergy/anaphylaxis	–	–	26%

*Including migraine, scotoma and/or other neurological events.

observers, noting the different treatment techniques discussed and their stated potential complications. Website ownership was also recorded.

Results

Of the 49 websites examined, 21 belonged to individual physicians, 15 to private clinics or groups of physicians, four to national institutions and four belonged to device/drug manufacturers. Five websites were simply redirecting portals to websites already examined and, hence, were excluded from further analysis.

Surgery with stripping of the saphenous vein was discussed within 32 of the websites. Thermal ablation techniques (EVLA and/or RFA) by 31 and UGFS by 27 of the websites. Only 19 websites (43%) mentioned all the treatment methods available, within the same site.

Table 1 shows the complications mentioned in the websites that readers were warned may follow surgery, EVLA/RFA and UGFS.

Discussion

Management options for varicose veins have broadened over recent years with the introduction of the endovenous ablation techniques.^{1–5} Although endovenous techniques are popular with both patients and physicians due to

perceived advantages, evidence is lacking to suggest that any single technique is superior. Therefore, informing patients effectively to guide their decision making is more important than ever.

Almost everyone in the UK has access to the Internet and searches for health-related information are one of its most common uses.⁵ The Internet will often be responsible for a patient's first impressions and expectations due to its accessibility. In addition, Internet information supplements a personal consultation with a specialist and any patient information leaflets provided.

The General Medical Council reminds doctors that the process of gaining informed consent must include a discussion of 'options for treatment or management of the condition, including the option not to treat' and that 'for each option, explanations of the likely benefits and the probabilities of success; and discussion of any serious or frequently occurring risks'.⁶ This means that patients should be informed of the full range of options available, including techniques not necessarily offered by their specialist.

It is, therefore, disappointing to note that over half of the websites reviewed in this study did not include information relating to all the treatment methods that are now available. Furthermore, the majority of the websites did not alert the reader to the common complications of varicose vein treatment (Table 1). We acknowledge that the information provided on the Internet is not intended to replace a formal consultation and we assume that specialists using websites counsel their patients fully. However, consultations have their own limitations and the impressions created by websites should not be underestimated. Patients may develop unrealistic expectations, leading to complaints or litigation, if they are unaware of possible complications and the expected outcome of their treatment.

Study limitations

Not reviewing all the information available on the Internet (over 400,000 pages) is a limitation of this study. A potential patient, however, is unlikely to do this either and would also perhaps rely on the sites that come to the top of the search list. Additionally, we did not intend to assess the quality of the information provided within the websites, which has been attempted by others.⁷ This includes the important point that many varicose veins do not need treating or can be managed with graduated compression stockings. We simply examined whether each website contained a mention of all possible intervention options and of the potential complications that may follow the treatment of varicose veins with these techniques.

Conclusions

Currently, the information provided on the Internet has

serious deficiencies. The potential to use the Internet to inform patients fully and to supplement the process of gaining informed consent is not being utilised. Incomplete and/or inaccurate information on websites may actually generate unrealistic expectations in patients seeking varicose vein treatment.

Acknowledgement

This study was presented, in part, at the Venous Forum of the Royal Society of Medicine, Bristol, UK on 16 March 2007.

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