



Surgical Ethics on Endovenous Varicose Vein Surgery

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“What is contrary to propriety, do not look at,
do not listen to, do not speak, and do not act with.”
- The Analects of Confucius -

Varicose veins (VVs) are a common chronic venous disorder mainly caused by superficial venous incompetence. The symptoms are usually vague, including heaviness, limb fatigue, and discomfort; therefore, VVs are often left untreated. However, recent developments in minimally invasive surgery, especially endovenous therapy (EVT), have rapidly increased the number of treated cases of VVs. New EVT modalities include endovenous laser ablation, radiofrequency ablation, cyanoacrylate adhesive closure, and mechanochemical ablation, and they have replaced traditional high ligation/stripping (HLS). The recent European Society for Vascular Surgery guidelines for chronic venous disease also recommended EVT first [1], stating: “For patients with great saphenous vein incompetence requiring treatment, endovenous thermal ablation is recommended as first choice treatment, in preference to HLS and ultrasound guided foam sclerotherapy.”

Unfortunately, some ethical issues have been raised regarding the high cost of EVT and non-professional VVs treatment administered at some private vein clinics. In a tertiary outpatient vascular clinic, I usually see many patients who were initially examined in other private clinics, were advised to undergo EVT for both legs, and come to my clinic for a second opinion. Many of them have only reticular veins or telangiectasia, and most of them are proven to have no or minimal segmental reflux, not requiring endovenous ablation of any axial saphenous vein.

Endovenous therapies for VVs are not reimbursed by the National Health Insurance but are only covered by personal health insurance plans in Korea. The rapid increase

in the coverage costs for VVs treatment has led to conflicts between insurance companies and doctors in several cases. According to National Health Insurance Service data, the number of patients with VVs increased rapidly from 162,000 in 2016 to 212,000 in 2020, with an annual increase rate of 7%. The total cost of VVs treatment in 2020 was 60,800,000,000 Korean Won, with an annual increase rate of 9.8% [2]. This situation seems to be similar in the United States and Western Europe. On a website, a Pittsburgh vein doctor described [3], “The ethics of many VV centers in this country are in question. The public must be aware that unscrupulous vein centers are prospering. These franchised VV centers are spreading like hamburger joints.”

The issues of unethical practice on VVs can be diverse, including the following concerns: 1) The credentials of VVs doctors are questionable. Self-proclaimed VVs doctors often receive vein training at three-day conferences or by product suppliers. They have no official training in venous disease and are trained in specialties other than vascular surgery. In the era of HLS, only vascular surgeons could treat patients with VVs. However, in this era of EVT, the technical threshold of EVT is too low to block any doctor from joining this enterprise. 2) Unnecessary venous Doppler tests are routinely performed on women who present only with telangiectasia and spider veins. And reporting standards and diagnostic criteria of VVs are not usually followed. 3) Unnecessary laser or other EVT procedures for normal saphenous veins are performed daily. The risks and complications of untreated VVs are overemphasized, including heart failure, acute limb ischemia, vessel rupture, or even amputation. 4) Many unproven combinations of EVTs are performed in some unscrupulous vein centers; 4-vein ablation for every corner, combined high ligation and EVT in the same leg, two different EVT in the same leg, and

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Cite this article; Vasc Specialist Int 2022. <https://doi.org/10.5758/vsi.223821>

too frequent repeated therapies. 5) Because of the Korean insurance system, EVT is covered by statutory uninsured medical benefits, so doctors can decide the cost and negotiate with patients. Therefore, the difference in treatment costs is huge, up to 4-5 times between vein clinics.

Last November, during the annual symposium, the Korean Society for Phlebology (KSP) declared the Code of Ethics to support evidence-based treatment and warn against unethical practices regarding VVs interventions [4]. The Korean Society for Vascular Surgery and KSP have just launched a campaign for the optimal treatment of VVs on their YouTube channels, which shares accurate information regarding VVs treatment to inform patients and doctors [5]. In the April issue of the Journal of the Korean Medical Association, several academic vascular surgeons joined and published some important articles on VVs in the form of a focused issue of this month to educate doctors and patients [6,7].

I strongly believe that this kind of self-purification effort is very important to protect not only patients but also

doctors. If the surgeon society cannot filter bad doctors, outside stakeholders will intervene in this practice without mercy. To strengthen the doctor-patient relationship and avoid falling prey to unethical practitioners, it is critical to educate and update patients and healthcare service providers regarding the options available for VVs treatment. It is time to build up the organized power of conscious ethical surgeons for the education, surveillance, warning, and rehabilitation of commercialized doctors.

CONFLICTS OF INTEREST

Seung-Kee Min has been the editor-in-chief of Vasc Specialist Int since 2019.

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REFERENCES

- 1) De Maeseneer MG, Kakkos SK, Aherne T, Baekgaard N, Black S, Blomgren L, et al. European Society for Vascular Surgery (ESVS) 2022 clinical practice guidelines on the management of chronic venous disease of the lower limbs. *Eur J Vasc Endovasc Surg* 2022;63:184-267.
- 2) Lee SW. Korean Society for Phlebology declared 'Code of Ethics' as self-purification in diagnosis and treatment of varicose veins [Internet]. Seoul: Doctors News; C 2021 [cited 2021 Dec 11]. Available from: <http://www.doctorsnews.co.kr/news/articleView.html?idxno=141831>.
- 3) Pittsburgh Vein Doc. Some varicose vein centers may have ethical issues [Internet]. Pittsburgh: Pittsburgh Vein Doc; C 2014 [cited 2022 Jun 22]. Available from: <https://pittsburghvein-doc.com/ethics-varicose-vein-centers/>.
- 4) Kim YS. Reasons to pay attention to the Code of Ethics of the Korean Society for Phlebology [Internet]. Seoul: Doctors News; C 2021 [cited 2021 Dec 11]. Available from: <https://www.doctorsnews.co.kr/news/articleView.html?idxno=141938>.
- 5) The Korean Society for Vascular Surgery, The Korean Society for Phlebology. Campaign for all correct knowledge on vascular diseases by KSVS and KSP [Internet]. Seoul: The Korean Society for Vascular Surgery; C 2021 [cited 2021 Dec 11]. Available from: https://www.youtube.com/channel/UC_S1dGhW700hBuoquXAhBwA.
- 6) Min SK. Campaign for the optimal treatment of varicose veins: welcoming the declaration of the Code of Ethics issued by the Korean Society for Phlebology. *J Korean Med Assoc* 2022;65:188-191.
- 7) Yang SS, Kim SM. Myths and truths about varicose veins. *J Korean Med Assoc* 2022;65:225-231.