## EDITORIAL COMMENT

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## The national varicose vein study

Chronic venous disease (CVD) affects around 35% of the adult population in Portugal, similar to other Western countries. It is assumed that two million Portuguese women have CVD. As the name implies, its evolutive and chronic nature determines that CVD poses severe complications to the patients and society when left undiagnosed and untreated. Nationwide, this disease is responsible for over one million lost working days, 21% of job changes and 8% of early retirements<sup>1,2</sup>

Until the beginning of the twentieth century, venous pathology received relatively little attention from public opinion and the scientific community, despite having a higher prevalence than coronary artery disease, peripheral artery disease, heart failure and stroke combined. A few decades later, the advent of vascular ultrasonography allowed for improved diagnostic accuracy and preoperative characterization of CVD. However, this technological revolution was accompanied by a slight improvement in the surgical technique; it was only in the twenty-first century that interest and innovation in this area were relaunched when new minimally invasive intravenous techniques emerged, appealing to both patients and physicians<sup>3</sup>. These techniques, such as radiofrequency or laser thermal ablation and non-thermal ablation with cyanoacrylate glue, emerged as alternatives to open surgery and are currently the standard of care for treating lower limb varicose veins due to their efficacy and safety profile. In addition, current guidelines recommend endovenous thermal ablation as a first-line treatment for valvular incompetence of the saphenous veins, in preference for ligation and stripping or ultrasound-guided sclerotherapy.4

In Portugal, however, due to the more significant experience and easier access to this treatment modality, open surgery is still the most used approach for treating varicose veins of the lower limbs. Its widespread and rooted application, associated with gaps in the best scientific evidence, determines an inevitable inter-hospital variation in the surgical technique and the prescribed perioperative care.

In this context arises the National Varicose Vein Study. This national multicentric study clarifies the different techniques used in six national hospitals (Hospital de Braga, Centro Hospitalar Universitário do Porto, Centro Hospitalar do Tâmega e Sousa, Centro Hospitalar Universitário de Coimbra, Centro Hospitalar Lisboa Central and Hospital Garcia de Orta) regarding surgical treatment of varicose veins of the lower limbs, complemented with the characterization of prescription and compliance of post-surgical treatments, early complications and impact on the patient's quality of life, evaluated through a telephone interview around thirty days after the procedure.

So far, this study includes 128 patients who have undergone at least one ligation with or without stripping of the great or small saphenous vein during the second half of 2022. Females comprise the majority gender (72%), the average age is 52, and most patients have a preoperative CEAP C3s score.

Following the best recommendations available, the universal postoperative prescription of compression systems for the lower limbs stands out in our results. We verified that patients fully complied with the first five days of prescribed continuous usage; however, in the subsequent daily use, they



only reported using the elastic compression stockings for 31 of the 42 days (on average) prescribed, a phenomenon that can is explained by the discomfort associated with prolonged use and the notion of progressive symptoms improvement.

Also interesting is the analysis of the heterogeneity in the prescribed pharmacotherapy during the postoperative period, namely anticoagulants and antibiotics: some centers prescribe them routinely while others prefer a more expectant attitude.

Determining the length of medical leave from professional work in the postoperative period requires a holistic assessment of the patient, considering the surgical intervention's complexity and its functional, physical and psychological status. In our sample, about 60% required medical leave, prescribed for a median of twelve days. However, we found that more than 70% of these needed to extend the duration, and almost a quarter only resumed their work activity more than a month after the surgical intervention. Therefore, it may be necessary to rethink the appropriate time to prescribe and manage the patient's expectations to allow a complete and functional recovery.

More encouraging are the results of postoperative quality of life surveys — essential parameters for a complete assessment of the impact of any intervention. For example, one month after the procedure, patients reported median scores of 84 out of 100 in the CIVIQ-14 and 80 out of 100 in the EQ-5D-5L surveys; such results are comparable to those of studies with similar populations undergoing endovenous treatment.<sup>5,6</sup>

Thus, although the preponderant role of endovenous solutions is assumed nowadays, surgical treatment will remain an essential option in the therapeutic repertoire of any vascular surgeon in Portugal. The National Varicose Vein Study delves into this context, will continue to investigate the Portuguese panorama and will contribute to reinforcing scientific evidence, subsequently improving the quality of the medical care provided.

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