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Editorial

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Tributary ablation associated with truncal treatments: clinical context and decision-making

Stefano Ricci

Private Practice Phlebologist, Rome, Italy

Correspondence: Stefano Ricci, viale Tito Livio 98, Rome, Italy.

E-mail: stefanoricci1@outlook.it

The recent publication of a review on tributary treatment during Great Saphenous Vein (GSV) ablation[1] has stimulated a reflection on tactical aspects and suggests potential decision-making tools. Tributary ablation timing when treating GSV incompetence is a subject that has been debated since the introduction of endovascular truncal vein ablation techniques.[2-10]

Two schools of thought appeared: the first suggests phlebectomy concomitant to truncal treatment as a single procedure,[2] the second advises a staged procedure,[8] monitoring for varicosity regression. Residual varices can be treated in additional sessions using phlebectomy or sclerotherapy[11,12] or, as recently suggested, laser.[13]

Concomitant phlebectomy offers the obvious advantage of concluding the treatment in a single surgical session, extending the local anaesthesia of the truncal procedure, providing a predictable result, and rarely needing further treatments. Operative time prolongation (about 20 minutes)[10] and risk of overtreatment are the negative aspects.[4]

Staged tactic shortens the basic surgical procedure but does not guarantee the immediate disappearance of varicosities; the time of their clearing, when it occurs, is not predictable, and secondary procedures are frequently required (66-100%).[9] The possible saving of venous normalised network, avoiding unneeded trauma, is the most important advantage.

After about 20 years of debate on this subject, the question of which strategy is most advantageous is still in discussion, as demonstrated by the review studies of Aherne[9] and Hager.[10]

There is strong evidence that both procedures achieve similar good clinical results at one year, so the debate is not based on "which choice gives better results", but, in reality, on "what is more convenient" for operators, patients, and insurance.[14]

Traditional surgeons are probably more inclined to complete the operation; non-surgeons (dermatologists, angiologists, phlebologists, *etc.*) may prefer to limit the procedure to GSV obliteration. Practitioners with great experience in phlebectomy would enjoy completing the work more than less experienced experts,[14] while sclerotherapy supporters would willingly wait and see.[11,12] Generally, hectic surgical schedules would require faster procedures, preferring a staging strategy, while a busy office practice would be glad to avoid multiple access. Hospital treatments would probably try to address the problem definitively in one admission, while private centres may prioritise long-term relationships with clients, offering gradual treatments that encourage continuity of care.

Non-tumescent techniques (Mechanochemical Ablation, MOCA; cyanoacrylate closure; High-Intensity Focused Ultrasound, HIFU), modern alternatives to classic thermal ablation that do not require tumescence, presumably don't invite further proceeding with a phlebectomy, a procedure requiring infiltration anaesthesia.[3]

According to Hager's analysis,[10] the patient's preference appears to favour simultaneous treatment, at least in some instances (calibre >3mm), similar to Lane's observation.[6]

Patients' expectations for varicose vein correction aren't uniform worldwide, but they are shaped by geographic, cultural, and social environments. In Mediterranean populations, especially, certain factors influence the demand for quicker intervention:

Hot summers amplify venous symptoms (heaviness, swelling, pain), pushing patients to seek faster solutions. Frequent body exposure at beaches or in lighter clothing increases cosmetic concerns, making patients less tolerant of delayed results. Visible varicose veins may carry more stigma in

cultures with a strong aesthetic focus, leading patients to prefer immediate treatment rather than conservative management. In some regions, patients may be accustomed to interventional rather than observational approaches, valuing minimally invasive or rapid techniques. This contrasts with populations in cooler climates, where longer clothing seasons and different lifestyle habits may make a "wait and see" strategy more acceptable, especially if symptoms are mild. Age can also influence a different choice: younger patients may be more demanding and refuse a slow progression, while an elderly person may be more patient and, above all, accept a partial regression without a strict cosmetic outcome.

Clinical situation is another field of discussion. Clinical/anatomical determinants may refine decision-making beyond patient expectations and practitioner preferences: limited varicosities extension may be solved right away, while a diffuse pathology could more wisely be favoured by waiting. Parallely, consistent varicose dilatation (>6 mm) will hardly benefit from waiting, the same as long-standing varices with sclerotic evolution. Finally, the presence of complications as inflammation, trophic changes, and oedema (Clinical, Etiology, Anatomy, and Pathophysiology, CEAP, C4-C6) advises against immediate aggressive tactics. The clinical/anatomical pattern becomes the most objective conditioning factor, often overriding the variability introduced by geography, age, or practitioner philosophy.

From the evolutionary point of view, moreover, many questions still need to be answered: is incompetent tributary regression going to be stable, or will it reappear as soon as a recurrence occurs? Will this wait-and-see tactic stabilize the venous network and lower recurrences, maintaining the venous haemodynamic balance better than aggressive avulsions?[9] Also, the time to wait for regression assessment is not established, going from 1 month for Shazner,[7] 2-3 months for Welsh,[8] to 6 months for Monaham.[3]

According to the literature, between 30% and 60% of staged patients will require a successive procedure on tributaries[10] *versus* 6,3%[9] of the concomitant group.

Insurance coverages may contribute to the treatment tactics. Reimbursement rules differ markedly across countries, regions, and between public and private payers, and are also influenced by institutional agreements and the exact policy wording and clinical documented indication. The matter is quite complicated and can be affected by subjective interpretation by insurer agents, about the need for phlebectomy (when "necessary" or cosmetic).

At the end of this analysis, it becomes clear that the classic question of whether concomitant or staged phlebectomy is better cannot be answered solely by statistics. The decision requires careful consideration of a range of clinical, social, and organizational factors (Table 1), many of which have only been partially explored in this context. Creating a structured list of these variables could form the basis for a practical scoring system, designed to assist physicians while ultimately allowing the patient to have the final say in making the most appropriate choice.

The final decision should always be shared with the patient.

Interestingly, in conservative strategies (*Conservatrice Hémodynamique de l'Insuffisance Veineuse en Ambulatoire*, CHIVA; Ambulatory Selective Varices Ablation under Local Anesthesia, ASVAL) the tributaries treatment is directly, and even primarily, involved in the treatment, the saphenous ablation passing in second line. In ASVAL, a phlebectomy may, or may not be the final solution (in 64,4 of the cases at 120 months),[15,16] while in CHIVA tributary treatment is basically limited to a simple disconnection flush to the saphenous trunk, the varicose wall dilatation tending to be healed by the pression expected regularization if the main saphenous leaking point is controlled.[17]

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Table 1. Prototype: concomitant *vs* staged phlebectomy decision score instructions.

1. Patient-related		
Factor	**Concomitant (+1)**	**Staged (+1)**
Age	<50 years	>70 years
Priority	Strong cosmetic demand	Mainly symptom relief
Lifestyle	Frequent body exposure (Mediterranean, summer, public-facing work)	Low exposure, preference for gradual care
Session tolerance	Prefers a single intervention	Accepts multiple sessions
Comorbidities	Fit for surgery	Fragile, multiple comorbidities
2. Disease-related		
Factor	**Concomitant (+1)**	**Staged (+1)**
Anatomical extension	Limited, localized tributaries	Diffuse pathology
Vein diameter	>6 mm dilatation	<6 mm dilatation
Evolution	Long-standing/sclerotic	Early or unstable
CEAP stage	C3–C6 (edema, skin changes, ulcers)	C2 (predominantly cosmetic)
3. Practitioner-related		
Factor	**Concomitant (+1)**	**Staged (+1)**
Background	Experienced phlebectomist / surgeon	Sclerotherapy-oriented / non-surgeon
Philosophy	Completeness-oriented	Stepwise, conservative

Resources	Equipment and time available	Limited time, office-based constraints
4. System-related		
Factor	**Concomitant (+1)**	**Staged (+1)**
Setting	Hospital-based, definitive correction preferred	Private clinic, continuity of care model
Insurance	Coverage favors single comprehensive session	Coverage favors staged documentation
Scheduling	OR slot available, short waiting list	Busy schedule, prefer shorter/faster interventions
Scoring interpretation		
Concomitant favored: if concomitant score exceeds staged by ≥3 points		
Staged favored: if staged score exceeds concomitant by ≥3 points		
Balanced/uncertain: if within 2 points → shared decision with patient is critical		