

EVIDENCE BASED STATEMENT

DOMAIN 3, Statement 1

TOPIC: Clinical & instrumental indications to superficial venous treatment

SEARCH TERMS & SOURCES

((indication) AND (lower limb)) AND (chronic venous disease) AND (treatment)

INCLUSION CRITERIA

- Lower limb only
- Reviews
- Publication < 10 years, only ENG

SEARCH RESULT BEFORE - AFTER SELECTION

7/2

PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

1. De Maeseneer MG, Kakkos SK, Aherne T, et al. Editor's Choice - 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 Feb;63(2):184-267.
2. Bellmunt-Montoya S, Escribano JM, Pantoja Bustillos PE, et al. CHIVA method for the treatment of chronic venous insufficiency. *Cochrane Database Syst Rev.* 2021 Sep 30;9(9):CD009648.
3. Giancesini S, Obi A, Onida S, et al. Global guidelines trends and controversies in lower limb venous and lymphatic disease: Narrative literature revision and experts' opinions following the vWINTER international meeting in Phlebology, Lymphology & Aesthetics, 23-25 January 2019. *Phlebology.* 2019 Sep;34(1 Suppl):4-66.
4. Chen C, Cai Y, Long X, et al. Age is not a barrier to good outcomes following ambulatory high ligation and stripping for varicose veins: A prospective cohort study. *Medicine (Baltimore).* 2019;98(49):e18085.
5. van der Velden SK, van den Bos RR, Pichot O, Nijsten T, De Maeseneer M. Towards an individualized management strategy for patients with chronic venous disease: Results of a Delphi consensus. *Phlebology.* 2018;33(7):492-499
6. Giancesini S, Menegatti E, Sisini F, et al. Comparison Between Duplex Ultrasound and Multigate Quality Doppler Profile Software in the Assessment of Lower Limb Perforating Vein Direction. *Eur J Vasc Endovasc Surg.* 2018 May;55(5):688-693
7. Dillavou ED, Harlander-Locke M, Labropoulos N, et al. Current state of the treatment of perforating veins. *J Vasc Surg Venous Lymphat Disord.* 2016 Jan;4(1):131-5.
8. Davies HO, Popplewell M, Darvall K, et al. A review of randomised controlled trials comparing ultrasound-guided foam sclerotherapy with endothermal ablation for the treatment of great saphenous varicose veins. *Phlebology.* 2016 May;31(4):234-40.
9. Chwała M, Szczeklik W, Szczeklik M, et al. Varicose veins of lower extremities, hemodynamics and treatment methods. *Adv Clin Exp Med.* 2015 Jan-Feb;24(1):5-14.
10. Jones JW, McCullough LB. Discovering overtreatment: second-opinion dilemma. *J Vasc Surg.* 2014 Dec;60(6):1690-2.
11. Robertson LA, Evans CJ, Lee AJ, et al. Incidence and risk factors for venous reflux in the general population: Edinburgh Vein Study. *Eur J Vasc Endovasc Surg.* 2014 Aug;48(2):208-14.

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IDENTIFIED REFERENCES

1. Masuda E, Ozsvath K, Vossler J, et al. The 2020 appropriate use criteria for chronic lower extremity venous disease of the American Venous Forum, the Society for Vascular Surgery, the American Vein and Lymphatic Society, and the Society of Interventional Radiology. *J Vasc Surg Venous Lymphat Disord.* 2020 Jul;8(4):505-525.e4.
2. Chwała M, Szczeklik W, Szczeklik M, et al. Varicose veins of lower extremities, hemodynamics and treatment methods. *Adv Clin Exp Med.* 2015 Jan-Feb;24(1):5-14.

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TEXT FOR INCLUSION IN THE DOCUMENT

Domain **3**, issue **1**: TOPIC: “**Clinical & instrumental indications to superficial venous treatment**”

Proper indication to lower limb superficial venous reflux treatment is of paramount importance to avoid overtreatment as well as undertreatment, for both intentional and unintentional clinical malpractice.

[Jones JW, McCullough LB. Discovering overtreatment: second-opinion dilemma. J Vasc Surg. 2014 Dec;60(6):1690-2].

Venous reflux represents a risk factor for chronic venous disease development,

Yet no significant difference in advanced CEAP clinical class presentation was reported in the groups with and without reflux at the 13 years follow up in the Edinburgh Study.

[Robertson LA, Evans CJ, Lee AJ, et al. Incidence and risk factors for venous reflux in the general population: Edinburgh Vein Study. Eur J Vasc Endovasc Surg. 2014 Aug;48(2):208-14].

Therefore, anatomical reflux recurrence must not be the only outcome parameter and venous reflux presence can not be considered as the only factor leading to treatment indication. This is clearly evidence in the comparison between thermal tumescent and ultrasound guided foam sclerotherapy treatments: while the anatomical recurrence rate performance is in favor of a thermal tumescent approach, patient reported outcomes, morbidity and potentially cost-efficacy might be in favor of ultrasound guided foam sclerotherapy.

[Davies HO, Popplewell M, Darvall K, et al. A review of randomised controlled trials comparing ultrasound-guided foam sclerotherapy with endothermal ablation for the treatment of great saphenous varicose veins. Phlebology. 2016 May;31(4):234-40].

The concept of “appropriateness” is pivotal in this context. A valuable 2020 publication reported appropriateness in the thermal tumescent ablation of the saphenous and of the incompetent tributaries whenever associated with chronic venous disease symptoms.

To the contrary, the ablation of a not refluxing anterior accessory saphenous vein during an incompetent great saphenous vein treatment has been considered rarely appropriate. In general, asymptomatic patients should not be treated. Perforating veins should be treated only if in a symptomatic patient in advanced stages of the disease.

***[Masuda E, Ozsvath K, Vossler J, et al. The 2020 appropriate use criteria for chronic lower extremity venous disease of the American Venous Forum, the Society for Vascular Surgery, the American Vein and Lymphatic Society, and the Society of Interventional Radiology. J Vasc Surg Venous Lymphat Disord. 2020 Jul;8(4):505-525.e4].**

Saphenous sparing demonstrated to be a reliable alternative, potentially with a reduction in the reflux recurrence rate, but properly collected data are needed to lead to a strong recommendation.

Bellmont-Montoya S, Escribano JM, Pantoja Bustillos PE, et al. CHIVA method for the treatment of chronic venous insufficiency. Cochrane Database Syst Rev. 2021 Sep 30;9(9):CD009648.

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STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 3, Statement 1

Documented vein signs, symptoms & reflux must be present to indicate a superficial venous procedure

SELECTED REFERENCES

1. Jones JW, McCullough LB. Discovering overtreatment: second-opinion dilemma. *J Vasc Surg.* 2014 Dec;60(6):1690-2
2. Robertson LA, Evans CJ, Lee AJ, et al. Incidence and risk factors for venous reflux in the general population: Edinburgh Vein Study. *Eur J Vasc Endovasc Surg.* 2014 Aug;48(2):208-14
3. Davies HO, Popplewell M, Darvall K, et al. A review of randomised controlled trials comparing ultrasound-guided foam sclerotherapy with endothermal ablation for the treatment of great saphenous varicose veins. *Phlebology.* 2016 May;31(4):234-40
4. Masuda E, Ozsvath K, Vossler J, et al. The 2020 appropriate use criteria for chronic lower extremity venous disease of the American Venous Forum, the Society for Vascular Surgery, the American Vein and Lymphatic Society, and the Society of Interventional Radiology. *J Vasc Surg Venous Lymphat Disord.* 2020 Jul;8(4):505-525.e4.
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IDENTIFIED LITERATURE BIAS

Main focus on anatomical reflux recurrence

SUGGESTED NEXT LINES OF RESEARCH

Focus on quality of life, patients reported outcomes, cost-effectiveness

Indication to treatment in asymptomatic patients