

EVIDENCE BASED STATEMENT

DOMAIN **01**, Statement **03**

TOPIC: “Venous & Lymphatic disease coexistence prevalence”

SEARCH TERMS & SOURCES

((lymphedema) AND (venous)) AND (prevalence)

INCLUSION CRITERIA

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

SEARCH RESULT BEFORE - AFTER SELECTION

21/6

PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

1. Dean SM, Valenti E, Hock K, et al. The clinical characteristics of lower extremity lymphedema in 440 patients. J Vasc Surg Venous Lymphat Disord. 2020 Sep;8(5):851-859.
2. Dessalvi S, Villa G, Campisi CC, et al. Decreasing and preventing lymphatic-injury-related complications in patients undergoing venous surgery: A new diagnostic and therapeutic protocol. Lymphology. 2018;51(2):57-65.
3. Farrow W. Phlebolympheidema-a common underdiagnosed and undertreated problem in the wound care clinic. J Am Col Certif Wound Spec. 2010;2(1):14-23.
4. Suzuki M, Unno N, Yamamoto N, et al. Impaired lymphatic function recovered after great saphenous vein stripping in patients with varicose vein: venodynamic and lymphodynamic results. J Vasc Surg. 2009 Nov;50(5):1085-91
5. Van Bellen B, Gross WS, Verta MJ Jr, et al. Lymphatic disruption in varicose vein surgery. Surgery. 1977 Aug;82(2):257-9.

EVIDENCE BASED STATEMENT

Domain 1; Statement 03

IDENTIFIED REFERENCES

- 1: O'Donnell TF Jr, Allison GM, lafrati MD. A systematic review of guidelines for lymphedema and the need for contemporary intersocietal guidelines for the management of lymphedema. *J Vasc Surg Venous Lymphat Disord*. 2020 Jul;8(4):676-684.
- 2: Moffatt C, Keeley V, Quere I. The Concept of Chronic Edema-A Neglected Public Health Issue and an International Response: The LIMPRINT Study. *Lymphat Res Biol*. 2019 Apr;17(2):121-126.
- 3: Dean SM. Cutaneous Manifestations of Chronic Vascular Disease. *Prog Cardiovasc Dis*. 2018 Mar-Apr;60(6):567-579.
- 4: Müller M, Klingberg K, Wertli MM, Carreira H. Manual lymphatic drainage and quality of life in patients with lymphoedema and mixed oedema: a systematic review of randomised controlled trials. *Qual Life Res*. 2018 Jun;27(6):1403-1414.
- 5: Dayan JH, Ly CL, Kataru RP, Mehrara BJ. Lymphedema: Pathogenesis and Novel Therapies. *Annu Rev Med*. 2018 Jan 29;69:263-276.
- 6: Keast DH, Despatis M, Allen JO, Brassard A. Chronic oedema/lymphoedema: under-recognised and under-treated. *Int Wound J*. 2015 Jun;12(3):328-33.

EVIDENCE BASED STATEMENT

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TEXT FOR INCLUSION IN THE DOCUMENT

DOMAIN 01, Statement 3 , TOPIC: “Venous & Lymphatic disease coexistence prevalence”

Lower limb venous function impairment has been identified among the most common causes of lymphedema. Dean et al reported more than 40% of lymphedema cases associated to venous hypertension.

[Dean SM, Valenti E, Hock K, et al. The clinical characteristics of lower extremity lymphedema in 440 patients. J Vasc Surg Venous Lymphat Disord. 2020 Sep;8(5):851-859].

Indeed, phlebo-lymphedema has been considered the most frequent cause of lymphedema in the western world.

The progressively elongated life span of the population leads to an increase in the prevalence of cardiac pump failure, as well as in the use of medications that might aggravate the same lymphatic drainage.

Obesity is a risk factor for both vein and lymphatic drainage impairment and it can represent per se a cause of venous and lymphatic failure, even in absence of vessel compromise. Obesity represents a potential obstruction to the drainage, therefore its management is of paramount importance in both chronic venous disease and lymphedema cases.

[Farrow W. Phlebolymphe-dema-a common underdiagnosed and undertreated problem in the wound care clinic. J Am Col Certif Wound Spec. 2010;2(1):14-23].

Preliminary data show how venous surgery can jeopardize the lymphatic integrity and evidence is missing on which therapeutic approach is best in terms of lymphatic function preservation.

A condition of edema could then persist after the restoration of the normal vein flow, paradoxically following the same vein intervention.

[Van Bellen B, Gross WS, Verta MJ Jr, et al. Lymphatic disruption in varicose vein surgery. Surgery. 1977 Aug;82(2):257-9].

On the contrary, data have showed also the possibility of a restoration of the lymphatic function following the vein drainage restoration, therefore demonstrating the need of a better understanding of the relationship between these two connected vascular systems.

[Suzuki M, Unno N, Yamamoto N, et al. Impaired lymphatic function recovered after great saphenous vein stripping in patients with varicose vein: venodynamic and lymphodynamic results. J Vasc Surg. 2009 Nov;50(5):1085-91]

All the above mentioned considerations, together with the lack of usually reported objective vein and lymphatic functionality outcomes, make the real prevalence of vein and lymphatic dysfunction coexistence not possible to be currently assessed, but at the same time fundamental to be taken into consideration.

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Domain 1; Statement 03

STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 01, Statement 3 “venous issues are among the main causes of lymphatic impairment”

SELECTED REFERENCES

1. Dean SM, Valenti E, Hock K, et al. The clinical characteristics of lower extremity lymphedema in 440 patients. *J Vasc Surg Venous Lymphat Disord.* 2020 Sep;8(5):851-859.
2. Farrow W. Phlebolymphe­dema-a common underdiagnosed and undertreated problem in the wound care clinic. *J Am Col Certif Wound Spec.* 2010;2(1):14-23.
3. Van Bellen B, Gross WS, Verta MJ Jr, et al. Lymphatic disruption in varicose vein surgery. *Surgery.* 1977 Aug;82(2):257-9.
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identified LITERATURE BIAS

Lack of objective outcome measures differentiating vein and lymphatic disorders

SUGGESTED NEXT LINES OF RESEARCH

Prevalence and incidence study on phlebo-lymphedema