

# EVIDENCE BASED STATEMENT

DOMAIN **09**, Statement **10**

TOPIC: “Graduated compression safety profile and contraindications”

## SEARCH TERMS & SOURCES

(graduated compression) AND (side effects)

### INCLUSION CRITERIA

- Lower limb only
- Systematic Reviews, Meta-Analysis, Reviews, RCI
- Publication < 10 years, only ENG

## SEARCH RESULT BEFORE - AFTER SELECTION

37 - 1

### PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

1. Rabe E, Partsch H, Morrison N, et al. Risks and contraindications of medical compression treatment - A critical reappraisal. An international consensus statement. *Phlebology*. 2020 Aug;35(7):447-460
2. Rother U, Grussler A, Griesbach C, et al. Safety of medical compression stockings in patients with diabetes mellitus or peripheral arterial disease. *BMJ Open Diabetes Res Care*. 2020 Jun;8(1):e001316
3. Stücker M, Danneil O, Dörler M, et al. Safety of a compression stocking for patients with chronic venous insufficiency (CVI) and peripheral artery disease (PAD). *J Dtsch Dermatol Ges*. 2020 Mar;18(3):207-213.
4. Rabe E, Partsch H, Hafner J, et al. Indications for medical compression stockings in venous and lymphatic disorders: An evidence-based consensus statement. *Phlebology*. 2018 Apr;33(3):163-184.
5. Andriessen A, Apelqvist J, Mosti G, et al. Compression therapy for venous leg ulcers: risk factors for adverse events and complications, contraindications - a review of present guidelines. *J Eur Acad Dermatol Venereol*. 2017 Sep;31(9):1562-1568
6. Franks, P., Barker, J., Collier, M. et al. Management of patients with venous leg ulcer: challenges and current best practice, *J Wound Care*, 2016; 25; 6, Suppl, 1-67

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## Domain 9; Statement 10

### IDENTIFIED REFERENCES

1. Knight Nee Shingler SL, Robertson L, Stewart M. Graduated compression stockings for the initial treatment of varicose veins in people without venous ulceration. Cochrane Database Syst Rev. 2021 Jul 16;7(7):CD008819.

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### TEXT FOR INCLUSION IN THE DOCUMENT

DOMAIN 09, Statement 10, TOPIC: “Graduated compression safety profile and contraindications”

Graduated compression stockings demonstrated to be a main pillar in venous and lymphatic disease management, moreover with a high safety profile. Possible contraindications include severe congestive cardiac failure (NYHA IV). However, reducing moderate oedemas, without shifting larger blood volumes towards the right heart, can be beneficial and achievable by using light medical compression stocking.

**\*[Rabe E, Partsch H, Morrison N, et al. Risks and contraindications of medical compression treatment - A critical reappraisal. An international consensus statement. Phlebology. 2020 Aug;35(7):447-460]**

In a similar way, peripheral arterial disease represents a possible contraindication in its most severe forms, yet, in specifically selected patients, specifically designed compression stockings showed no reduction in microperfusion and an improvement in the perfusion of definite limb locations.

**[Rother U, Grussler A, Griesbach C, et al. Safety of medical compression stockings in patients with diabetes mellitus or peripheral arterial disease. BMJ Open Diabetes Res Care. 2020 Jun;8(1):e001316]**

There are other local conditions in which stockings may cause damage, among which advanced peripheral neuropathy, fragile tissue paper skin over the bony prominences, severe limb asymmetry, dermatitis and allergic reactions to the fabric.

**[Rabe E, Partsch H, Hafner J, et al. Indications for medical compression stockings in venous and lymphatic disorders: An evidence-based consensus statement. Phlebology. 2018 Apr;33(3):163-184].**

This observation highlights the importance of proper health professional and patients education in compression prescription and use, in order to maximize its benefits, reducing its already minimal risks.

In the same way, proper interaction among international experts dedicated to the topic is needed to agree not only on the absolute contraindications, but also on the relative ones, that currently remain quite heterogeneous in the different guidelines.

**[Andriessen A, Apelqvist J, Mosti G, et al. Compression therapy for venous leg ulcers: risk factors for adverse events and complications, contraindications - a review of present guidelines. J Eur Acad Dermatol Venereol. 2017 Sep;31(9):1562-1568]**

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### STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 09, Statement 10

“Properly prescribed compression is safe. Possible contraindications are: neuropathy, skin alterations, heart failure, severe limb asymmetry. In peripheral arterial disease compression can be of benefit in specific cases, after careful evaluation”

### SELECTED REFERENCES

1. Rabe E, Partsch H, Morrison N, et al. Risks and contraindications of medical compression treatment - A critical reappraisal. An international consensus statement. *Phlebology*. 2020 Aug;35(7):447-460
2. Rother U, Grussler A, Griesbach C, et al. Safety of medical compression stockings in patients with diabetes mellitus or peripheral arterial disease. *BMJ Open Diabetes Res Care*. 2020 Jun;8(1):e001316
3. Rabe E, Partsch H, Hafner J, et al. Indications for medical compression stockings in venous and lymphatic disorders: An evidence-based consensus statement. *Phlebology*. 2018 Apr;33(3):163-184
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### identified LITERATURE BIAS

Lack of registry data

### SUGGESTED NEXT LINES OF RESEARCH

Real world data