

EVIDENCE BASED STATEMENT

DOMAIN **11**, Statement **09**

TOPIC: “Radiofrequency evidence in C1”

SEARCH TERMS & SOURCES

(radiofrequency) AND ((teleangectasia) OR (spider veins) OR (reticular veins))

INCLUSION CRITERIA

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

SEARCH RESULT BEFORE - AFTER SELECTION

1/1

PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

Nakano LCU, Cacione DG, Baptista-Silva JCC, Flumignan RLG. Treatment for telangiectasias and reticular veins. Cochrane Database of Systematic Reviews 2021, Issue 10

Diken Aİ, Alemdaroğlu U, Özyalçın S, et al. Adjuvant radiofrequency thermocoagulation improves the outcome of liquid sclerotherapy in the treatment of spider veins of the leg: A pilot study. Phlebology. 2021 Sep;36(8):620-626

Tepavcevic B, Matic P, Radak D. Comparison of sclerotherapy, laser, and radiowave coagulation in treatment of lower extremity telangiectasias. J Cosmet Laser Ther. 2012 Oct;14(5):239-42

Prieto V, Zhang P, Sadick NS. Comparison of a combination diode laser and radiofrequency device (Polaris) and a long-pulsed 1064-nm Nd:YAG laser (Lyra) on leg telangiectases. Histologic and immunohistochemical analysis. J Cosmet Laser Ther. 2006 Dec;8(4):191-5.

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IDENTIFIED REFERENCES

1. Meesters AA, Pitassi LH, Campos V, Wolkerstorfer A, Dierickx CC. Transcutaneous laser treatment of leg veins. *Lasers Med Sci.* 2014 Mar;29(2):481-92.

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TEXT FOR INCLUSION IN THE DOCUMENT

DOMAIN 11, Statement 09, TOPIC: “Radiofrequency evidence in C1”

Low energy percutaneous radiofrequency thermocoagulation has been used for many years now among the lower limb telangiectasias available treatment options.

[Prieto V, Zhang P, Sadick NS. Comparison of a combination diode laser and radiofrequency device (Polaris) and a long-pulsed 1064-nm Nd:YAG laser (Lyra) on leg telangiectases. Histologic and immunohistochemical analysis. J Cosmet Laser Ther. 2006 Dec;8(4):191-5].

The gold standard remains sclerotherapy, but radiofrequency was compared also to transdermal laser, showing a possible valuable alternative in specific cases characterized by small and superficial vessels.

[Tepavcevic B, Matic P, Radak D. Comparison of sclerotherapy, laser, and radiowave coagulation in treatment of lower extremity telangiectasias. J Cosmet Laser Ther. 2012 Oct;14(5):239-42]

The literature is lacking properly conducted double-blind controlled clinical trials comparing the different laser modalities, therefore high grade recommendations can not be done in favor of a specific laser or radiofrequency type, still leaving the gold standard role to sclerotherapy.

[Meesters AA, Pitassi LH, Campos V, Wolkerstorfer A, Dierickx CC. Transcutaneous laser treatment of leg veins. Lasers Med Sci. 2014 Mar;29(2):481-92].

Recently, radiofrequency has shown a potential role in synergy with sclerotherapy, but further investigations are needed.

[Diken Aİ, Alemdaroğlu U, Özyalçın S, et al. Adjuvant radiofrequency thermocoagulation improves the outcome of liquid sclerotherapy in the treatment of spider veins of the leg: A pilot study. Phlebology. 2021 Sep;36(8):620-626]

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STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 11, Statement 09

“thermal coagulation of the vein can be an option in aesthetic leg vein treatment, but further data are needed before recommending it over sclerotherapy”

SELECTED REFERENCES

1. Prieto V, Zhang P, Sadick NS. Comparison of a combination diode laser and radiofrequency device (Polaris) and a long-pulsed 1064-nm Nd:YAG laser (Lyra) on leg telangiectases. Histologic and immunohistochemical analysis. *J Cosmet Laser Ther.* 2006 Dec;8(4):191-5
2. Tepavcevic B, Matic P, Radak D. Comparison of sclerotherapy, laser, and radiowave coagulation in treatment of lower extremity telangiectasias. *J Cosmet Laser Ther.* 2012 Oct;14(5):239-42
3. Meesters AA, Pitassi LH, Campos V, Wolkerstorfer A, Dierickx CC. Transcutaneous laser treatment of leg veins. *Lasers Med Sci.* 2014 Mar;29(2):481-92
4. *Diken Aİ, Alemdaroğlu U, Özyalçın S, et al. Adjuvant radiofrequency thermocoagulation improves the outcome of liquid sclerotherapy in the treatment of spider veins of the leg: A pilot study. *Phlebology.* 2021 Sep;36(8):620-626

identified LITERATURE BIAS

Lack of RCT

SUGGESTED NEXT LINES OF RESEARCH

RCT