

Notes on the virtual Phlebectomy: Conservative REflux Elimination Device (CREED)

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submitted: Nov 22, 2022, accepted: Dec 1, 2022, Epub Ahead of Print: Dec 21, 2022, published: Apr 30, 2023

Conflict of interest: None

DOI: [10.24019/jtavr.144](https://doi.org/10.24019/jtavr.144) - Corresponding author: Prof. Stefano Ricci, varicci@tiscali.it

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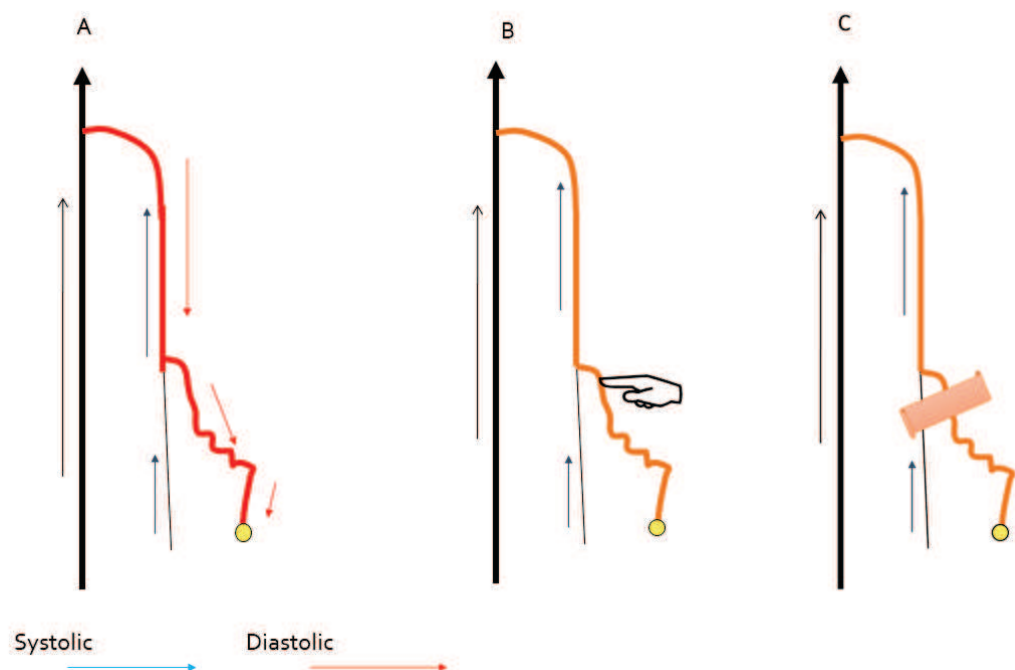


Figure 1 - A: Re- Entry perforator (yellow circle) is centered on the tributary vein. B: Finger compression on tributary stops the reflux in the whole system. C: A stable compression by taping maintains temporarily stable the system.

A finger's compression is able to occlude a tributary varicose vein's lumen and stop the flow of the reflux coming from the Great Saphenous Vein (GSV). As documented by Duplex assessment, the reflux will be abolished both in the distal tributary and in the proximal

GSV stem, provided that the re-entry pathway is centred on the tributary vein (like in about 50% of the cases). (Fig 1 a, b). At the opposite, if the GSV has its own re-enter perforator, the saphenous reflux will persist. This manoeuvre has been called Reflux Elimination Test (RET)¹

and is one of the basic principles of the conservative management popularized by CHIVA proposal².

Starting from this premise it is advisable that in RET positive cases the finger's action could be changed by an external adequate localized compression (fig 1 c), that could be stable instead of occasional like finger's one. In this way, the reflux abolition could be maintained for a (more or less) longer period, acquiring a therapeutic effect either than the diagnostic action³.

The external localized compression by a Conservative REflux Elimination Device (CREED) has been tried by the application of a strip of a taping material (the one in use in the Kinesio taping method⁴ placed with a slight pressure exactly in the place where the finger's test was found to be effective for the reflux abolition. (Fig 2). Actually, the exact point is not directly on the tributary junction (to avoid compression on the GSV) but is placed 1 cm distal as to compress the tributary alone. If the varice needs a more active compression for its caliber reduction, a cotton thickness made by a dental roll may be inserted over the point to be compressed.

It could be a more or less temporary solution when a definite treatment must be deferred or it is impossible.

The device suggested is under clinical verification and further experience is needed to confirm its validity.

References

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Figure 2 - Taping of thigh and leg tributaries at the junction with the GSV trunk. (courtesy Paolo Casoni)