

Cartridge-applied silicone pads for eccentric compression of varicosities after sclerotherapy: Saphenal, popliteal and spider vein application

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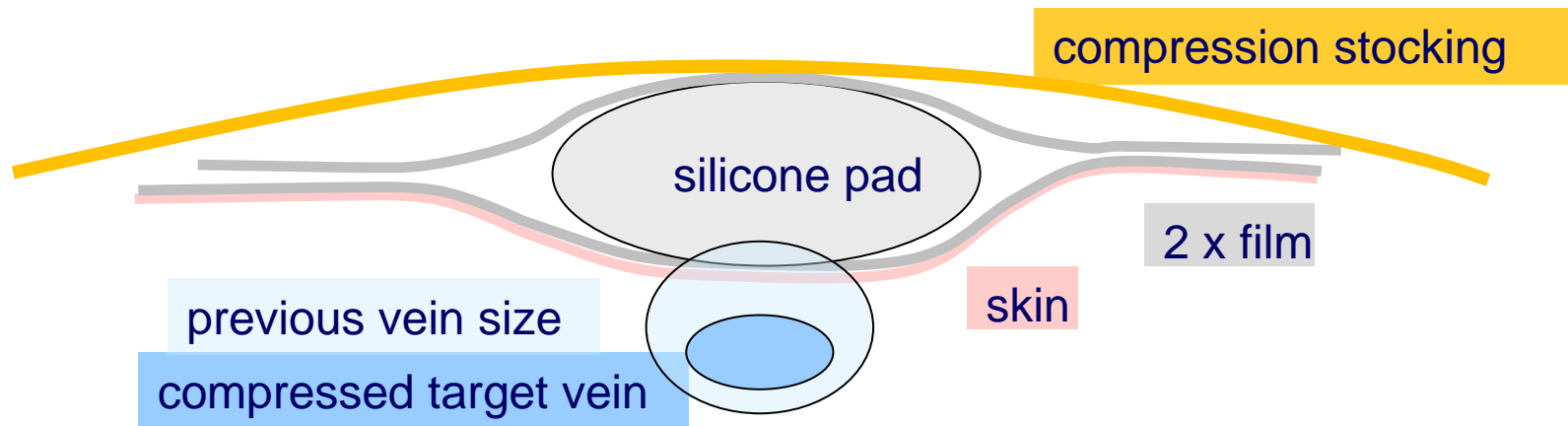
background

Eccentric compression may support symptom-free healing periods after venous surgery or endovenous treatment, in particular after sclerofoam.

However, home-made compression media show several drawbacks: **Friction and skin irritations** are frequent, long-term wearing is not well tolerated, daily renewal is exhausting but otherwise personal hygiene will suffer.

Venartis® SGP

The SGP system applies silicone gels from a cartridge along the vein to compress, placed on an underlying self-adhesive film and covered with a second film, working as a functional unit, firmly but removably attached to the skin.



methods

- 60 patients undergoing microfoam sclerotherapy of GSV/LSV, popliteal varicosities or spider veins, n = 20 each group.
- Randomized parts of the varicosities were covered with SGP for two weeks, while other parts were left to compression by medical stockings (CCI. 2) only.
- Daily showers and sports were allowed.
- Follow-up incl. ultrasound video/photography: 2 - 4 - 8 weeks.

methods

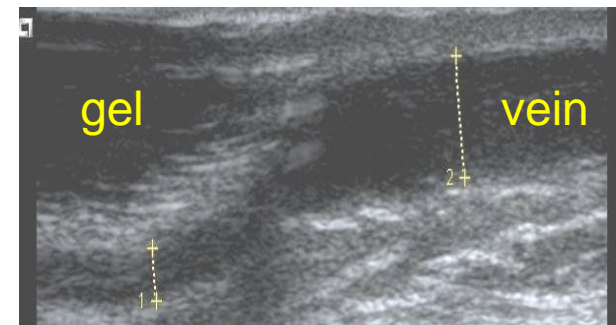
Silicon gel prototypes used in this study:

- A) SGP 22 (Shore-A 22) for use along saphenous veins of 10 – 22 mm diameter,
- B) SGP 14 (Shore-A 14) for use in regions close to joints, in particular the popliteal region, and
- C) SGP 24 fh (Shore-A 24, fast hardening) for use on spider veins of 0.2 – 1 mm diameter

results

Saphenal SGP22

- improvements in vein diameter shrinkage of **33 – 62% (mean 48.1)** compared to concentric compression.
- reduction of local complaints or pain by **78%**.



results

Popliteal SGP 16 achieved improved diameter reductions of **21 – 52%** (mean 36.2) compared to stocking only.



results

Spider veins showed increased disappearance after 2 weeks in 67.2 % and after 8 weeks in 82.1% in SGP-covered spots compared to regions without SGP.

example: status after 2 weeks



complications

- Minor skin irritations not limiting patient comfort or application time: 8/60 cases (13.3%);
- All skin irritations occurred at the edge of silicone pads in locations perpendicular to the direction of patient's movements;
- No other adverse reactions due to the SGP, in particular no allergies.

conclusions

Venartis® SGP:

- safe, effective and comfortable
- suitable for **saphenal use** (target depth < 1 cm)
- achieves appropriate compression in the **sensitive popliteal region**
- even **spider veins** show faster regression

To optimize the results, SGP dimensions and external pressure will undergo further studies.

read more: www.venartis.org (non-commercial)