

Sclerotherapy of Reticular and Telangiectic Veins: How I Do It

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1 Basic rules

Strategy of telangiectic vein treatment: first high pressure feeding veins are injected.

US examination is recommended even in telangiectic vein cases.

Too much sclerosing material can cause a transparietal burn, a iatrogenic injury to the vein and its consequences can be seen on the skin.

I use 0.5 % polidocanol

Never use foam for telangiectic veins, it is too strong.

I use excentric compression with bandages for 2-5 days after every session, even in spider vein cases.

2 Treatment of reticular veins behind telangiectasias is also necessary

Transillumination helps to treat feeding veins of telangiectasias.

3 AV shunts are behind some teleangectic veins

Arterial pulse can be detected with CW Doppler in the region of some spider veins.

If pulse sounds above a spider vein, this location is suspicious.

Laser-Doppler flowmetry on telangiectic veins: there is much higher flow in some telangiectic veins than in others and in the surrounding skin.

Consequences of being aware of AV shunts

- Amount of given sclerosing agent is limited to prevent its getting into an artery through the shunt.

- No danger of paravenous diluted polidocanol injection, this will not cause any damage.
- Bleeding veins can be closed with a quadel.
- I make lavage of the lumen of the treated telangiectic vein with diluted sclerosing agent.

Stopping bleeding with quadel: when a little amount of 0.5 % polidocanol is given intracutaneously, bleeding stops. It helps us to work with a clean surface.

Lavage to remove clot:

- Clot makes pigmentation.
- Elimination of clot is recommended.
- Introduction of needle into the occluded lumen of the telangiectic vein, first transversally (these are punctures) and then longitudinally.
- This is made with insulin (28G) needle and 0.5 % polidocanol.
- Paravenous injection will not cause any skin damage, which means there is no risk (exclusively intravenous injection of polidocanol can evoke necrosis).

What is the effect of lavage?

- **Removes clot** with help of multiple puncture and fluid.
- Introducing needle into the lumen **fractures the clot**, which helps it to be dissolved.
- Injecting polidocanol into the clot also **helps dissolution** process.
- **Repeated sclerotherapy** improves the final result.

Corona phlebectatica paraplantaris

Laser-Doppler examination shows high speed and pulsating flow in the corona phlebectatica paraplantaris.

Treatment with sclerotherapy: this is a consequence of CVI. For long-lasting results it is compulsory to treat source veins first.

Conclusions

- Sclerotherapy of telangiectic veins in my practice is very different from the treatment of bigger veins.
- There is a big difference between telangiectic and other veins in some regards, and maybe these are a separate entity.

References

1. Goldman MP, Bergan JJ, Guex JJ: Sclerotherapy. 4th edition, 2007.
2. Benigni J-P, Sadoun S: Telangiectasia: Benefits of a Foam Sclerosing Agent. *J Phlebol* 2002, 1:35-49,
3. Bihari I., Magyar É., Dér J.: Varicositas par fistule arterioveineuse acquise non traumatique. *Phlébologie*. 40: 117-121. (1987)
4. Bihari I., Magyar É.: Reasons for Ulceration after Injection Treatment of Telangiectasia. *Dermatol. Surg.* 27:133-136. (2001)
5. Bihari I et al: Microshunt Histology in Telangiectasias. *Internat J Angiol.* 1999:98-101
6. Bihari I, A Murányi, P. Bihari: Laser-Doppler Examination Shows High Flow in Some Common Telangiectasias of the Lower Limb. *Dermatologic Surgery.* 31:388-390. (2005)
7. Bihari I, Egresits J, Nemcsik J, Farkas K: Laser-Doppler examination of corona phlebectatica paraplantaris. *Internat Angiol* 28(Supp 1):109. (2009)

