Foam Sclerotherapy—Simple Solution for Difficult Problem

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Dear Editor:

Chronic venous insufficiency (CVI) of the lower limbs is a common problem in adults. The exact prevalence of this condition in the Indian population is not known because there are no epidemiological studies. The extrapolated prevalence rate of varicose vein in India providing warning is about 47,928, 177 in statistics [1]. Minimally invasive newer endo-luminal treatment modalities like radiofrequency ablation (RFA) and endovenous laser therapy (EVLT) have been used to treat varicose veins, achieving equal or better results as compared to conventional surgery, with reduced post-operative morbidity and faster recovery. Though effective, these modalities are very expensive and available only in bigger hospitals of metro cities. Common Indian citizen neither have access nor can afford this treatment.

Ultrasound-guided foam sclerotherapy (UGFS), especially when catheter assisted, has shown very good results comparable to expensive endo luminal treatment modalities [2]. It offers great promise in a developing country like India not only because both Doppler and Polidocanol are widely available but also they are relatively cheap. We compared the outcome of duplex ultrasound guided, catheter directed foam

sclerotherapy (UGFS) and radiofrequency ablation (RFA) in the management of great saphenous varicose veins with sapheno-femoral incompetence using clinical assessment (Venous Clinical Severity Score (VCSS), Venous Disability Score (VDS)) and duplex imaging.

After procedure, improvement was noted in both the treatment group in follow-up, and both the modalities were found to be equally effective. The improvement in subjective complaints, as assessed by VCSS and VDS, was significant and comparable at every visit suggesting excellent clinical results and high patient satisfaction.

Obliteration of treated great saphenous vein segment was noted in all the limbs of RFA group on duplex sonography. In UGFS group, obliteration was successful in majority of cases. Very few had treatment failure where baseline mid-thigh diameter of GSV trunk was more than 10 mm (12 and 13 mm), and they required multiple sessions (three sessions) of foam sclerotherapy. However, outcome of both the groups was statistically comparable (p value > 0.05).

None of the patients had serious complications. Relatively more post-procedural pain, ecchymosis, and persistent cannulation site numbness of the skin were reported in some patients of RFA treatment arm of study, which seem inherent to heat-based therapies. Sclerotherapy arm subjects had self-limiting mild post-procedural pain and cord-like induration along GSV with slightly higher incidence of thrombophlebitis as reported in previous studies.

Though the sample size was small and duration of follow-up was 3 months, still the results are very encouraging with ultrasound guided, catheter directed foam sclerotherapy. A recent study from India with more number of patients and 1-year

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follow-up also claims that ultrasound-guided foam sclerotherapy is very effective [3].

Hence, ultrasound-guided foam sclerotherapy appears to be ideally suited for Indian patients both in terms of economy and access with good results.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no competing interests.

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References

1. Prevalence and incidence of varicose veins. Available from: <http://www.cureresearch.com/v/varicose-veins/stats.htm>
2. Tan VK, Abidin SZ, Tan SG (2012) Medium-term results of ultrasound-guided, catheter-assisted foam sclerotherapy of the long saphenous vein for treatment of varicose veins. *Singapore Med J* 53:91–104
3. Maurya AK, Singh S, Sachdeva V, Nath B, Verma SC, Gupta PK (2015) Outcome of ultrasound guided foam sclerotherapy treatment for varicose veins: procedure is standard and need no further study. *Indian J Vasc Endovasc Surg* 2:96–100