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Sadoun S, Benigni JP, Sica.

SUMMARY AND COMMENTS BY:

Creton D.Nancy, France.

SUMMARY

This prospective study was carried out to analyse efficacy of sclerosant foam in treatment of long and short saphenous insufficiency . The study included 612 patients (82% women). Treatment of the long saphenous vein (LVS) represented 79% of the cases and in 88% of these the mean diameter of the LSV was 5.75 mm, In 12% of the cases, the mean diameter was 4.98 mm.

The foam was obtained from sodium tetradecylsulfate in 87% of the cases and from polidocanol in 13% of the cases (mean concentration 2.5%). Ultrasound guided sclerotherapy was carried out and an average volume of foam of 2.5 ml injected 4.5 cm below the sapheno-femoral junction (SFJ). When necessary, a second injection was carried out 10 cm below the SFJ 81 days later and another injection 15 cm below the junction 91 days afterwards.

Closure of the trunk was obtained in 80% after the first injection and in 86% after the second injection. Effectiveness of the treatment was significantly better for a greater saphenous trunk with a diameter under 7 mm and for short saphenous trunk (SSV) with a diameter under 5 mm. The authors suggest a limitation in the diameter under which the occlusion percentage is significantly better (7 mm for the GSV and 5 mm for the SSV). The best efficacy obtained with the smaller diameter injections can be explained by the fact that the injected volume of foam was the same in each case and not adjusted for vein diameter. Therefore they concluded that in order to obtain complete displacement of the blood and to increase the time of contact of the foam with the vein wall, it is advisable to adjust the volume of foam to the size of the treated vessel.

COMMENTS

This study, which was carried out on a large number of patients (612), confirms important information about foam sclerotherapy. Efficacy of the sclerosing foam is due to the fact that its volume and its viscosity displace the same volume of blood which allows a closer and longer contact between the sclerosing agent and the endothelium. Complete closure of the trunk is essential for immediate and effective treatment. Therefore, it is interesting to consider truncular sclerosis carried out with catheter technique in which the foam injection could fill the whole saphenous trunk. Theoretically this would lead to a complete occlusion of the trunk in 87% of cases. It is well-known that incomplete removal of a refluxing trunk or flush ligation alone is not satisfactory in the long run. It has been found that simple flush ligation alone gives good results in only 8% of cases followed for at least five years. (2)

The excellent results of foam sclerotherapy can be compared to those obtained by endovenous radiofrequency obliteration Closure®. The two-year result analyse of these has shown a 93.5 % truncular occlusion.

It is regrettable that this report does not detail the data concerning the hemodynamic state of the SFJ before and after treatment; nor does it mention the length of the sclerosis or the possible risks of thromboembolism.

Should sclerosant treatment, cheap and simple as it is, be rigorously studied and validated on the long term, it is very likely that it will present an interesting choice in competition with endovenous laser and radiofrequency truncular obliteration.

REFERENCES

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