Selected Summaries

A comparison of procedures for varicose veins

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SUMMARY
This randomized trial compared treatment outcomes of foam sclerotherapy, endovenous laser ablation and conventional open surgery for varicose veins. The trial, which included 798 patients at 17 centres in the UK, showed that disease-specific quality of life was similar in the surgical group but was worse in the sclerotherapy group. There were less procedural complications in the laser group (1%) as compared to the open surgery (7%) and sclerotherapy (6%) groups. Successful ablation of the main trunks of the saphenous vein was less common in the sclerotherapy (55%) than in the surgical group (83%). However, the measures of clinical success were similar in all the groups.

COMMENT
Varicose veins are extremely common. According to the Edinburgh vein study, the overall incidence of C1 varicose veins was 18.2% (95% CI 15.2%–21.6%), giving an annual incidence rate of 1.4% (1.1%–1.7%), with incidence rates similar in men and women: the 13-year age-adjusted incidence of varicose veins was 15.2% (10.4%–20.0%) in men and 17.4% (13.1%–21.7%) in women (p=0.97). The 13-year incidence of varicose veins increased consistently with age from 9.8% in those aged 18 to 34 years to 22.9% in those aged 55 to 64 years (p<0.001).2 Until recently, high ligation and stripping of the great saphenous vein had been the gold standard of treatment. In the past decade, minimally invasive treatment by thermoablation with radiofrequency ablation and endovenous laser have increasingly replaced stripping. In addition, ultrasound-guided foam sclerotherapy is becoming popular. The American guidelines for treatment of varicose veins recommend thermoablation instead of stripping (level 1b).3 Few recent studies have compared the anatomical success rate, complications and more importantly the quality-of-life measures at 6 months and 1 year after these procedures.3 This study is timely and relevant since treatment practices vary between the USA and the rest of the world. Conventional surgery (stripping) is still widely used in Europe as well as in developing countries. The quality-of-life measures at 6 months did not differ between the groups but the disease-specific quality of life was worse in the foam group. Procedural complications such as skin staining, numbness and haematoma were more with conventional surgery and sclerotherapy. However, the advantage of laser was offset by the need for foam sclerotherapy or phlebectomy for below knee residual varicosities at 6 weeks. Staining and lumpiness occurred most often at 6 months after sclerotherapy. The three groups had similar improvement in the clinical severity score at 6 months. However, foam sclerotherapy resulted in only 55% complete ablation and 23% partial ablation whereas surgery resulted in 83% complete ablation and 8% partial ablation. This study did not show any improvement in the quality-of-life score by adding phlebectomy to laser ablation but Carradice et al. have shown significant improvement in the score at 6 weeks among patients who underwent phlebectomy concomitantly with laser therapy.4 This study did not include radiofrequency ablation—another popular method. Rasmussen et al. included radiofrequency ablation and reported no difference in the quality of life at the end of 3 years in spite of higher incidence of recanalization in the sclerotherapy group.5 This study reports similar clinical recurrence rates in all the groups.

This study is relevant to us because such patients in India are treated by a variety of practitioners such as general surgeons, vascular surgeons, dermatologists, radiologists, cardiologists and wound care specialists. Endovenous procedures are considered far superior to open surgery and should be the procedure of choice. This study shows that conventional surgery is not inferior and has the same results on long-term follow-up. Since endovenous procedures are more expensive than open surgery and foam sclerotherapy, we should offer the latter to our patients with confidence.

REFERENCES

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