VNUS Is the Treatment of Choice for Recurrent Long Saphenous Varicose Veins

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Purpose

The purpose of this study was to assess the outcome of VNUS and traditional redo groin surgery (RGS) and long saphenous vein (LSV) stripping in patients with bilateral recurrent long saphenous varicose veins.

Methods

This was a randomized, patient-controlled, double-blind study. Sample size calculations required 16 patients. Their median age was 54, and 11 were women. The median CEAP class was three. At operation, one leg, chosen at random, was treated with endoluminal thermal ablation (VNUS) and avulsions using intraoperative duplex control. The other leg was treated with traditional RGS, exposure of the femoral vein, stripping of the LSV, and multiple avulsions. Postoperatively patients completed 10 cm visual analog scales for pain and bruising. Digital image analysis was used to objectively assess bruising. Statistical analysis was done using the Wilcoxon signed rank test for paired data. Results are expressed as median values (interquartile ranges).

Results

The time to perform VNUS was 26.5 minutes (range 18 to 32 minutes) compared with 39.5 minutes (range 24 to 45.5 minutes) for RGS (p = .04). The pain score for VNUS was 1.38 (range 0 to 4.8), significantly lower than that for RGS—4.5 (range 1.3 to 8), (p < .001). The bruise score for VNUS was 2 (range 0.5 to 4.8), and that for RGS was 5.2 (range 2.8 to 8.5), p < .001. All LSVs were sealed by VNUS at duplex follow-up. Some three legs in the RGS group had a minor complication, with one case in the VNUS group. No patients suffered a major complication.

Conclusion

VNUS causes less pain and bruising and can be done more quickly than RGS. VNUS should be considered the treatment of choice for recurrent long saphenous varicose veins.