Abstracts

Variations in Sapheno-Popliteal Junction Anatomy

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Background: Varicose veins are also common in short saphenous vein territory which has most variable anatomy in lower extremity. Variations in the veins of the lower limb are very common. This may be due to the anomalous involvement of the main trunks of the veins or their tributaries alone. Detailed knowledge regarding the anatomical variations such as reduplication of vein and unusual course and termination of the vein is a prerequisite in the diagnosis and management of vascular diseases. Methods: Included in the study were 626 Limbs. They were referred to radiology department by physicians, surgeons, and orthopedic surgeons for investigation of clinically detected superficial varicosities and suspected chronic venous disease. The examination includes history, clinical examination, and detailed duplex scanning of lower limb veins. Study data were based on the detailed examination and reporting of anatomic variation of termination of the short saphenous vein (SSV). Duplex scanning of lower limb veins was performed with the patient standing on low stool. Body weight was on placed on a contralateral limb which enabled examined side to be relaxed, slightly flexed, and externally rotated position. The popliteal fossa and calf venous system were evaluated with particular attention to termination of SSV. A real time B-mode zoom facility enabled optimal anatomic delineation of the SSV and Giacomini vein. The termination of SSV is variable and three patterns have been defined. Results: Following important observations was made: 410 out of 620 (65%) lower extremities shows the prevalence of Giacomini vein. In 45 out of 620 (7.2%) lower extremities, the SSV terminated into popliteal vein with further extension into thigh. In 171 out of 620 (27%) lower extremities, the SSV terminated into popliteal vein. Conclusion: A proper knowledge about the anatomy of the short saphenous vein and its communications with other veins and mode of termination of short saphenous vein is mandatory for a safe and successful intervention. The variant termination of the small saphenous vein may contribute to recurrent varicose veins in this territory; this aspect generally makes the subject of interest in the view of varicose vein operations.

Treatment of Incompetent Perforators in Recurrent Venous Insufficiency with Adhesive Embolization and Sclerotherapy

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Background: Recurrent lower limb venous insufficiency is a challenge in clinical practice and is most commonly due to incompetent perforators. Many of these patients do not have adequate symptom relief with compression and require some form of treatment for incompetent perforator interruption. The various treatment methods have been tried with different efficiencies. To evaluate the feasibility, efficiency, and safety of an outpatient combined cyanoacrylate adhesion–sodium tetradecyl sulfate sclerotherapy for the treatment of patients with symptoms of persistent or recurrent lower limb venous insufficiency secondary to incompetent perforators. Methods: Eighty-three limbs of 69 patients with symptoms of persistent or recurrent lower limb venous insufficiency secondary to incompetent perforators were treated with cyanoacrylate embolization of incompetent perforators and sclerotherapy of dilated collateral veins (surface branch varicose veins). Technical success, procedural pain, perforator occlusion, venous occlusion, clinical improvement, and ulcer healing were assessed. The follow-up was done 3- and 6-month postprocedure. Results: The procedure could be successfully performed in all patients. One hundred and ninety-one perforators were treated in total. Perforator and varicose veins occlusion rate was 100%. Deep venous extension of cyanoacrylate occurred in 4 (4.8%) patients, with no adverse clinical outcome. Venous clinical severity score improved from a baseline of 8.18 ± 3.60–4.30 ± 2.48 on 3-month follow-up and 2.42 ± 1.52 on 6-month follow-up (P < 0.0001). All ulcers showed complete healing within 3 months. Significant prolonged thrombophlebitis occurred in 38.5% of limbs. Conclusion: Combined cyanoacrylate adhesion and setrol sclerotherapy is technically easy, has a lot of advantages including being an outpatient procedure and highly efficacious but with a guarded safety profile.

Adhesive Embolization: Can it Replace Thermal Ablation for Truncal Varicosities?

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Background: Among the endovascular treatment, thermal ablation is one of the effective and acceptable methods of treatment. However, in a developing country like India, cost of the procedure is one of the main factors which determines the nature and type of the treatment. If a procedure can be done with one-fourth of the cost of thermal ablation for varicose veins with an equivalent result, it is beneficial to the patient. Methods: A prospective study is done to evaluate the occlusion and recanalization rate of cyanoacrylate embolization of trunk with foam sclerotherapy of varicosities and assess the cost benefits compared to the radiofrequency ablation of trunks with foam sclerotherapy of varicosities. Twenty patients in each group are randomly selected and underwent the procedure in the past 1 year. The patients are followed at least for 6 months (1 week, 1 month, 3 months, and 6 months), and the results are compared. Results: We are able to achieve technical success in 100% of patients. The occlusion rate for trunks is around 94% at 6 months for glue embolization compared to 94% for RF ablation at 6 months. There were no case with significant deep vein thrombosis in both groups. There is a significant improvement in venous clinical severity score with an ulcer healing rate more than 95% is noted in both groups. The cost of the Glue embolisation is cheap (at least one-fourth) compared to thermal ablation. Conclusion: Adhesive embolization...