



Management of venous malformations in Klippel-Trenaunay Syndrome

The following is an abstract of our latest published research regarding the treatment of Klippel-Trenaunay Syndrome from *Phlebology*, the journal of venous disease. We hope you will find this abstract informative.

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Objective:

To study the clinical presentation of patients with Klippel-Trenaunay syndrome (KTS) and the management of their venous malformations (VMs)/varicose veins with ultrasound-guided foam sclerotherapy using the COMPASS™ technique.

Methods:

In this open prospective series, eleven consecutive patients seeking treatment for KTS were included. Seven (64%) of the patients had previous surgical vein treatment procedures

Results:

The most common presenting complaint (100%) was pain. All but one patient (91%) presented with VMs/varicose veins. Chronic venous insufficiency (CVI) was seen in seven (64%). Soft tissue and bone deformity was present in all (100%). Limb lengthening was seen in eight (73%); limb thickening occurred in six (54%). A very unusual presentation was seen in one patient (9%) who had severe thinning and shortening of the leg. The primary vascular problem was venous malformation and was seen in nine patients (82%). This was followed by capillary malformation (CM)/port wine stain in seven (64%) and isolated lymphatic malformation (LM) in two (18%). The lateral embryonic Klippel-Trenaunay (KT) vein was detected in 10 patients (91%). Deep vein deformity was not detected in any of the patients. All of the patients had vascular deformities of the lower limb (100%); two (18%) had deformities of the thorax and one (9%) had a gastrointestinal (GI) malformation. None of the patients were aware of a history of KTS in their families; however, five (45%) had a family history of varicose veins. Eight patients (73%) completed the therapeutic plan and had a mean follow-up of 5±3.9 years. Six of these eight patients (75%) felt that they had good-to-excellent results from their treatment. Their quality of life substantially improved and was described as good. Furthermore, a positive trend was seen in improved venous dysfunction scores. Their therapeutic course was uneventful and none of the patients required amputation surgery in the follow up. Follow-up duplex ultrasound evaluation was used to reveal any evolving refluxing tracts that required further sequential treatment.

Conclusion:

The results in this series demonstrate the effectiveness of sequential ultrasound-guided foam sclerotherapy using the COMPASS™ technique in the management of KTS. The chronic nature of the VMs in KTS makes strict clinical monitoring and sequential treatment a necessity. For more information, please call 800-660-8346 or visit veinclinics.com.