

**NARROWING OF SUPERFICIAL AND DEEP VEINS BY
A READY-TO-WEAR COMPRESSION DEVICE DEMONSTRATED BY
MAGNETIC RESONANCE IMAGING (MRI)**

Giovanni Mosti¹, Hugo Partsch²

¹Angiology Department Clinica M.D. Barbantini, Lucca, Italy, ²Medical University, Vienna, Austria

Introduction: The question as to whether compression causes venous narrowing is still a subject of controversial discussion and depends on the relationship between intravenous pressure and compression pressure.

Aim: To show the influence of a ready-to wear compression device on the diameter of leg veins by MRI (magnetic resonance imaging).

Methods: Cross-sections were measured in the area of the largest calf diameter in a patient in the supine position, without compression and with a ready to-wear compression device* recommended for small and leg ulcers with an interface pressure of 23 mmHg at the mid calf level. This will be demonstrated in one out of 11 patients investigated with MRI.

Results: Venous narrowing can clearly be shown in the superficial and deep veins, and in particular in the muscular sinus. Under compression, the cross-section of the leg appears nearly circular.

Conclusion: The ready-to-wear compression device*, which exerts a pressure of 23 mmHg at the centre of the calf in the supine position, causes considerable narrowing of superficial and deep veins, as well as closure of the muscular sinus.

*Rosidal® mobil, Lohmann & Rauscher