

ABSTRACT: PATIENT COMPRESSION COMPLIANCE: Winning the Battle

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Table of content statement: In patients with incompetent great saphenous veins, pelvic veins, accessory veins, refluxing perforators and venous malformations, and leg ulcers, CVI is often associated with **debilitating** symptoms and complications.

- Chronic venous disease (CVD) and (CVI) Chronic Venous Insufficiency is a **major public health issue** carrying a high prevalence.
- Despite this, CVD and CVI are largely under-diagnosed and limited choices of efficient, effective, cost effective care is being provided to patients.

Anatomic/physiologic consideration: CEAP CLASS, OVERALL HEALTH



- Improve venous return from the lower extremities with venous stasis
- Counter effects of ambulatory venous hypertension
- Help control the progression of venous and lymphatic disease by increased contact of skin and dermal tissues with capillaries

General considerations for winning the battle of patient compliance with

compression: Learn about compression. Compression Vendors, National and International Conferences; Use compression yourself; Research Trials with research grants; Smart fabrics, patient monitoring and pressure monitors: embedded and external use.

Methods: Educate and Explain Clear benefit for compression therapy:

- a) Heal or prevent "Active venous ulceration"
- b) Prevention of PTS after DVT

- c) Prevention of TE events after surgery when combined with anti- coagulant prophylaxis
- d) Reduction of edema and inflammation
- e) Better cosmetic outcome

Technical Tips:

- There are many fabrics, styles and colors available, both in ready-to-wear and custom-measured garments.
- Two facts become clear at once: **Nothing “fits like skin,” and NO one fabric, style, brand, or type of compression is perfect for every patient**



What did we learn after bandaging, velcro inelastic wraps, flat knit compression, elastic stocking compression? “Adjustable **Velcro Compression Devices are More Effective than Inelastic Bandages in Reducing Venous Edema in the Initial Treatment Phase: A Randomized Controlled Trial** G. Mosti a,*, A.Cavezzi b, H.Partschc, S.Urso d, F.Campana eEur J Vasc Endovasc Surg (2015) ,1e7 **Conclusion: Re-adjustable AVCDs with a resting pressure of around 40 mmHg are more effective in reducing chronic venous edema than IBs with a resting pressure of around 60 mmHg. AVCDs are effective and well**

tolerated, not only during **maintenance therapy**, and also in **the initial decongestive treatment phase** of patients with **venous leg edema**.



What were the venous reflux or leg ulcer recurrences?

GRADE 1B: Strong compression hosiery (30-40 mmHg) is more effective than medium or low compression stockings

Grade 1A: 30-40 mmHg compression hosiery prevents recurrence of ulceration after healing

“Since long-term patient concordance with compression is relatively poor, it may prove more popular, effective and cost-effective to provide a single intervention to reduce recurrence, rather than life-long treatment with compression.” Samuel N, Carradice D, Wallace T, Smith GE, Chetter IC. Cochrane Database of Systematic Reviews 2013, Issue 10. Art. No.: CD009494. DOI:10.1002/14651858.CD009494.pub2. (Hull – UK)

What are the problems and modes of treatment? Well-performed compression techniques don't guarantee technical success. More commonly, however, recurrent varicose veins can be from non-saphenous sources such as pelvic insufficiency, saphenous tributary incompetence, previously unknown abdominal or pelvic obstruction, patient non-compliance or simple disease progression.

“WHATEVER THE CAUSE, IT IS IMPORTANT TO BEAR IN MIND THAT CONTROL OF LOWER EXTREMITY VENOUS INCOMPETENCE CAN BE ACHIEVED, BUT PERMANENT CURE IS AN UNREALISTIC GOAL. HUGO PARTSCH

Results: No significant, procedure related, adverse events occurred using donning and doffing methods mentioned, nor from the use of Velcro devices, circular or round knit stockings, and 4-layer bandaging with inelastic wraps and layered padding options.

The battle can be won if compression reduces patient complaints of cramping, restless legs, ankle or leg swelling, heaviness, inflammation, pain, or recurrent leg ulcers and DVT.

“Compression is not a punishment, if done correctly, with the patient’s involvement and cooperation.”

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Adjustable Velcro Compression Devices are More Effective than Inelastic Bandages in Reducing Venous Edema in the Initial Treatment Phase: A Randomized Controlled Trial G. Mosti a,* , A. Cavezzi b, H. Partsch c, S. Urso d, F. Campana e Eur J Vasc Endovasc Surg (2015) ,1e7