

Evaluation of a Tubular Compression System as an Alternative for Compression Bandages for Fragile Venous Leg Ulcer Patients

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Aim:

The increasing aging population often presents with mixed aetiology leg ulcers. Case ascertainment was used to evaluate if a tubular compression system could be an alternative for compression bandages in ambulant fragile and elderly venous leg ulcer patients.

Methods:

The 2-layer *tubular compression system delivers 10 mmHg with the first layer and 30 mmHg with the top layer, which is removed during the night. For copious exudate an **absorbent pad is used.

N = 60 patients with venous leg ulcers and an ABI >0.8 were included in the clinical evaluation.

Patients were followed weekly for six weeks evaluating: Pain (VAS: - = no pain; +/- = moderate pain; + = pain; ++ = severe pain), comfort, reduction of oedema and concordance (all on a 4 point scale).

Results:

- ✓ During the evaluation pain had reduced.
- ✓ Comfort was high for most patients and oedema reduction was effective in all but 6 patients.
- ✓ Concordance was good and only 4 patients needed time to get used to the treatment.

Typical case:

The 84 year –old woman had moderate edema and small venous leg ulcers on both legs that had been present for > 8 months. She suffered from dementia and removed her compression bandages. The ulcers were covered with an absorbent pad and tubular compression was used. The first layer stayed in place during the night and the second layer was reapplied every morning.



Various small ulcers are present on both legs



She has arthritis in her hands and haematomas due to her medication



Dressing** and tubular* compression application.



She seems comfortable with the compression system As she has left it in place. Within six weeks her ulcers had closed and the compression system was continued.

Conclusion:

- ✓ The obtained results indicate that the *tubular compression system can be an effective alternative for compression bandaging.
- ✓ Treatment is to be coordinated and patients require follow up visits once weekly to obtain optimal results.
- ✓ In patients with mixed venous – arterial disease (ABPI < 8) we used the first layer (10 mmHg) and if needed, during the day, a second first layer was applied (20 mmHg).