3 layer paste bandages were more effective than 4 layer bandages for healing venous leg ulcers


**Q Are 3 layer paste bandages as effective as 4 layer bandages for healing of venous leg ulcers?**

**METHODS**

- **Design:** randomised controlled trial.
- **Allocation:** (concealed)*.
- **Blinding:** unblinded.
- **Follow up period:** 1 year.
- **Setting:** a hospital leg ulcer outpatient clinic in London, UK.
- **Patients:** 133 patients (56% men) with venous leg ulcers. Exclusion criteria: arterial disease, diabetes mellitus, rheumatoid arthritis or systemic lupus erythematosus, positive sickle cell test, HIV infection, ulcer area <0.25 cm² or >100 cm², known sensitivity to paste, or ulcer not of venous aetiology.
- **Interventions:** 3 layer paste bandages (a Steripaste® hypoallergenic paste bandage, a Setopress® compression bandage, and a Tubigrip® bandage to hold everything in place) vs 4 layer bandages (Velband® orthopaedic wool, a crepe bandage, an Elset® compression bandage, and a Coban® bandage to secure preceding layers) (n = 69). Fully trained ulcer clinic nurses applied the bandages. Patients were initially seen weekly in clinic, which was extended to fortnightly if the ulcer was healing well. Randomisation was stratified by ulcer size (small >0.25 but <2.5 cm², medium >2.5 but <25 cm², and large >25 but <100 cm²).
- **Outcomes:** time to total ulcer healing, complete ulcer healing (restoration of entirely unbroken skin integrity with no purulent discharge after removal of scabs), and time to apply bandages.
- **Patient follow up:** 84%.

*Information provided by author.

**MAIN RESULTS**

The 3 layer paste group had a shorter median time to healing than the 4 layer group (12 v 16 wks, p = 0.04 for log rank test), although the difference in healing rates occurred only after >20 weeks. At 1 year, more patients in the 3 layer paste group had healed ulcers (one sided p = 0.031). Over the course of the study, 3 layer paste bandages took less time to apply than 4 layer bandages (mean 4.6 v 5.5 min, p = 0.008).

**CONCLUSION**

3 layer paste bandages were more effective than 4 layer bandages for healing venous leg ulcers, and healed ulcers more quickly than 4 layer bandages after 20 weeks of treatment.