

A COMPARATIVE STUDY EVALUATING TWO TYPES OF UNDER PADDING APPLIED WITH SHORT STRETCH COMPRESSION BANDAGES

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Aim :

The pilot study employed ten patients as their own control to compare two different under padding materials applied under short stretch adhesive compression bandages for venous leg ulcer treatment.

Patients :

Ten patients with venous leg ulcers that required compression therapy on both legs for reduction of edema were included in the study. The right leg received a foam* under padding layer (Fig. 2 and Fig.3) (group 1: n=10) and the left leg received under padding with orthopedic wool** (group 2: n=10). The same adhesive short stretch compression*** system was used on both lower legs. Fig. 4 shows application of the bandage over the foam under padding layer. The study observation period was 3 weeks.

Results :

In both group 1 and 2 there was a significant reduction of edema, which was equally fast. Patients reported less pain in group 1 compared to group 2. Further patient comfort was measured on a 10 point scale (10 very comfortable, 1 not at all comfortable). Comfort levels improved in both groups over the three week study period with the largest improvement in the foam group (mean for 3 weeks) group 1: 7.37 (SD ± 7.02.); group 2: mean 7.03 (SD ± 7.06). On average the bandages stayed in place for a week, with less slipping of the bandages over the 3 week period (0.87 cm versus 0.9 cm) and better fitting of the shoes noted in the foam group compared to group 2. Fig.1. The nurses reported the foam to be easier to apply than the orthopedic wool. Total costs of materials used during the study in group 1 was Euro 8.78 and Euro 4.99 for group 2.

Conclusion :

The foam under padding layer was easier to apply and slightly more comfortable, showing less slipping.

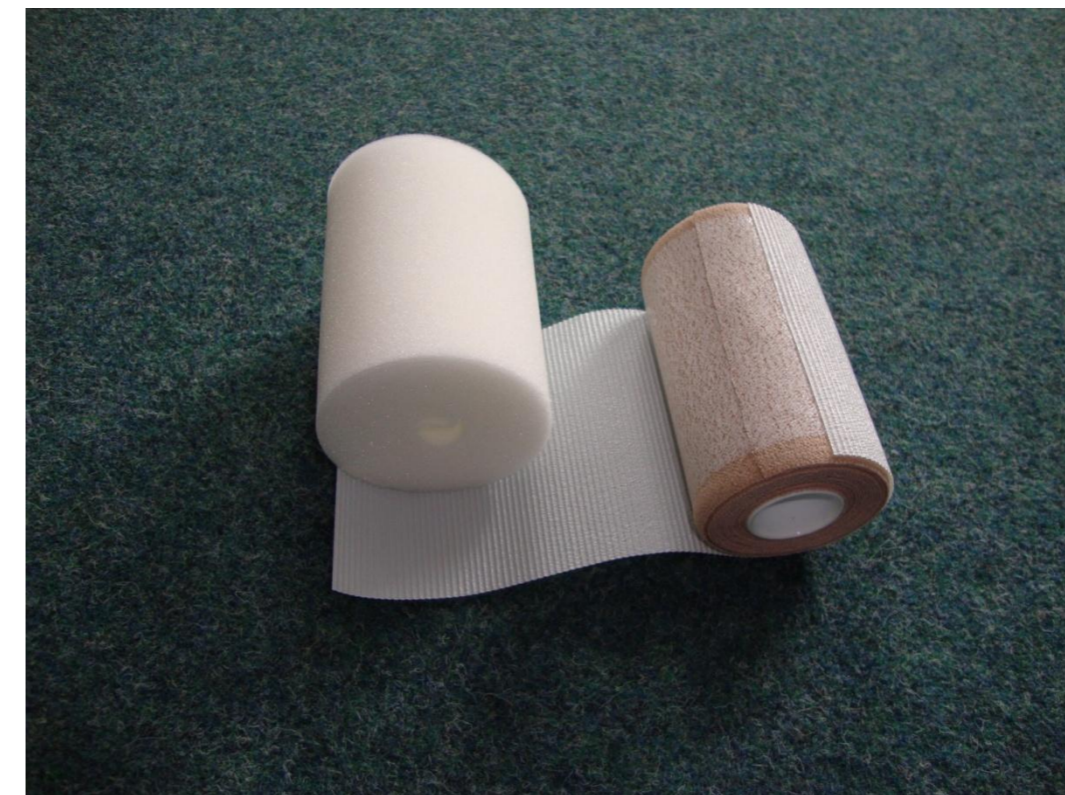


Fig 2: Foam padding and compression bandage used for the study



Fig 3: Foam padding was applied on the right leg of the patients



Fig 4: Application of the compression bandage

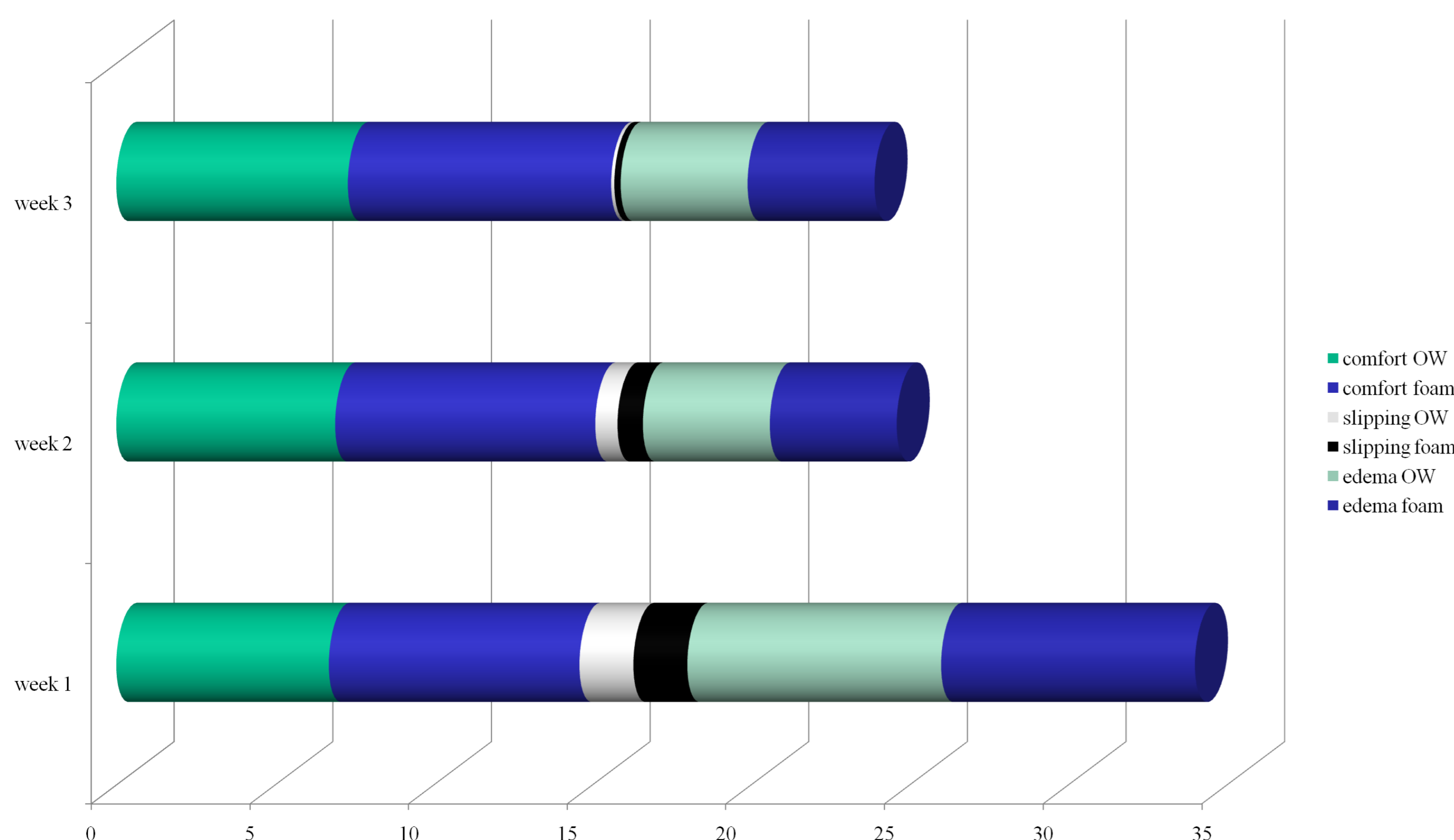


Fig. 1: patient comfort (10 point scale, slipping of the bandages (mean: cm) edema reduction



Fig 5: Compression with orthopedic wool on the left leg and with foam underpadding on the right leg.

Scientific grant: Lohmann & Rauscher GmbH, Rengsdorf, Germany

*Rosidal® Soft, **Cellona®, ***Panelast®, Lohmann & Rauscher GmbH, Rengsdorf, Germany

AIUC Conference Ancona
21 – 24 September 2011