# A NEW LYMPHEDEMA TREATMENT EVALUATED IN TWENTY LYMPHEDEMA PATIENTS

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#### **Introduction**:

Prevalence of lymphedema in The Netherlands is estimated at 350.000. Its cause may be congenital (10%) or it may develop (90%) due to phlebological disorders, trauma, surgery or oncology.<sup>1-3</sup> In combination with obesity and or lip-edema it may pose complex problems.<sup>2</sup> Often lymphedema is misdiagnosed and does not get the required treatment. Therapy is delivered by a multi-disciplinary team and comprises: skin care; exercise; high stiffness compression (SSI >10) and if applicable, lymph drainage therapy. Patient guidance, education and motivation is key in the delivery of lymphedema treatment.

## <u>Aim :</u>

Improvement of treatment outcome using a short stretch compression system and tubular under padding.

# Method :

Case ascertainment was used in patients with lymphedema of the legs or combined venous lymphatic leg ulceration. Twenty patients with a mean age of 52 years (SD ±15,29) median 52 (31 – 78) were successfully treated with \*short stretch cohesive bandages using \*\*tubular terry under padding (Table 1). The toes were included in the compression bandage using a \*\*\*fixation bandage. Patients received manual lymph drainage at the skin therapy clinic, twice weekly. Ulcers and skin lesions were covered with a \*\*\*\*bio-cellulose dressing covered with a \*\*\*\*super absorbent pad. Depending on exudate production dressing changes took place on average 2 x/weekly in the first 2 weeks of treatment. Skin cleansing was conducted using water or specific cleansers, a moisturizer was used to treat the dry skin condition.

# **Results :**

Skin lesions and ulcers were closed within a mean of 12.5 days and the reduction of edema was a mean of 6,5 cm (SD  $\pm$  4,35) median 5 (1-16) (measured at the thickest part of the calf) per week for the first 3 weeks. After 4 months of treatment all patients were fitted ready to wear compression stockings for maintenance therapy. To prevent recurrence, concordance with maintenance therapy is key. Patients were mobile and fitted their shoes again. Advantages shown are: Significant time savings for the therapists; less material used; lower temperature on the skin, enhanced patient comfort; the patients were able to tolerate a high degree of stiffness delivered with the compression bandages, leading to a shorter treatment time and faster resolution of the edema; the padding material was also used to fill pleats and cavities, thus saving foam and other padding material and enhancing patient comfort. Two typical patients are presented to illustrate the results.

Case 1:















**Fig.1a:** Situation at the start: Weeping lesions and edema.

**Fig. 1b:** A bio-cellulose covered with a foam dressing is applied.

Fig.1c: Back of the right lower leg.

Fig.1d: Application of padding material.

**Fig.1e:** 8 cm short stretch bandage is applied to the foot



Fig.1f: Result after 2 weeks: edema reduction of 8cm, lesions are closed.

Table 1: Characteristics of consenting participants (N=20)

Consenting participants N=20<br/>characteristicsMean (%) SD rangesexMale 4 (20%)Female 16 (80%)Age (years)52. (SD ± 15,29) median 52 (31 – 78)Duration of the edema (years)3.2 (SD ± 2.7)Presented issuesLesions and weeping skin; massive swelling, phlebitis;<br/>wound infection; maceration due to copious exudate<br/>production; obesity; poor mobility; pain; social isolation;<br/>poor quality of life

Case 2:







Fig.2c:

Exuding lesions at the toes.

Application of the bio-cellulose dressing, covered with foam.

The toe bandage is placed over the secondary foam dressing

#### **Conclusion :**

Wound healing and reduction of edema was achieved in a patient-friendly and effective manner within 4 months of treatment in all included patients, improving their quality of life significantly.

### **References :**

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\*Raucodur<sup>®</sup> Kohäsive, \*\*TG<sup>®</sup> Soft, \*\*\*Mollelast<sup>®</sup>, \*\*\*\*Suprasorb<sup>®</sup> X, \*\*\*\*\*Vliwasorb<sup>®</sup> Lohmann & Rauscher GmbH, Rengsdorf, Germany