Effectiveness of Mobiderm® bandages in the treatment of cancer-related secondary lymphedema
A pilot study

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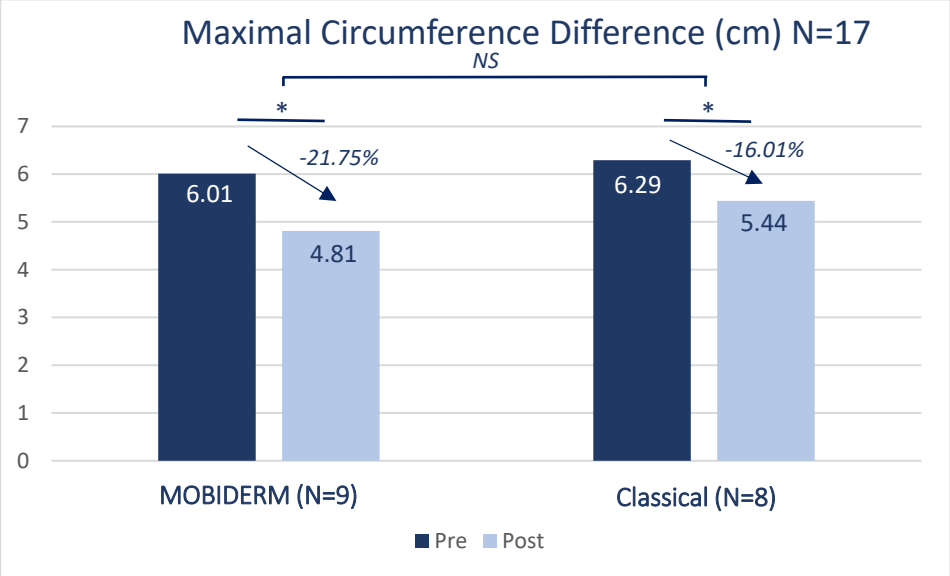
METHODS

- This retrospective observational study was conducted in the Republic of Korea between May 2017 and December 2019.
- 17 patients with unilateral cancer-related secondary limb lymphedema (LO) (lower and upper limb), confirmed using lymphoscintigraphy, and having done a 7 to 14 days Complete Decongestive Therapy (CDT) were included in this retrospective study.
- For all patients, the intensive phase of CDT involved multilayered compression bandaging consisting of a tubular bandage as the first layer, followed by a gauze bandage as the second layer, foam padding as the third layer, and finally, a short-stretch bandage and tapes as the fourth layer. Patients also underwent lymphatic drainage and carried-out self-exercises.
- Patients were divided into 2 treatment groups with the only difference between them being the type of the foam pad used in the compressive bandage:
    - MOBIDERM® bandage group: the first group used MOBIDERM® Bandages (n = 9),
    - Classical bandage group: while the second group used Cellona (Lohmann & Rauscher) (n = 8).
- Endpoint: Changes in the limb Maximal Circumference Difference (MCD) between the measurements performed before (Pre) and after (Post) treatment*.

** Limb circumference was measured at 5 (upper limb) to 6 sites (lower limb) per limb to identify the maximal circumference difference (MCD) between the affected and unaffected limbs.*

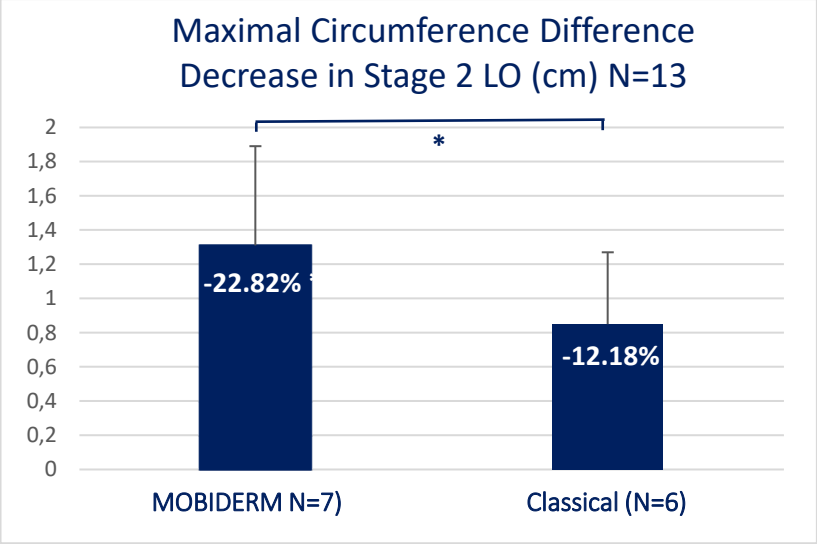
RESULTS

1 *Limb Circumference Reduction with MOBIDERM® Bandage*



A significant decrease of Maximal Circumference Difference (MCD) was observed in both the MOBIDERM® (-1.20cm or -21.75%) and classical (-0.85cm or -16.01%) bandage groups after 7 to 14 days of treatment. No statistically significant difference was observed between both groups.

2 *Significantly Higher Reduction in Patients with Stage 2 Lymphedema*



At inclusion, 13 patients presented with stage 2 lymphedema and 4 patients had stage 1 lymphedema according to the International Society of Lymphology (ISL) grading system.

When analyzing the results only for patients with ISL stage 2 lymphedema, it was observed that the participants in the MOBIDERM® bandage group showed a significantly higher decrease of 22.82% in Maximal Circumference Difference (MCD), in contrast to the classical bandage group, where an average reduction of 12.18% occurred ($p < 0.05$).

3 *Bandage Safety*

No serious complications or adverse events were reported in either treatment group throughout the duration of follow-up.

KEY MESSAGES

- ✔ MOBIDERM® bandages seem to represent a promising new alternative during the intensive phase of lymphedema treatment to control limb circumference.
- ✔ MOBIDERM® bandages allow for the reduction of limb circumference in patients with cancer-related lymphedema, and particularly in those with ISL stage 2 lymphedema.
- ✔ These results need to be confirmed in further prospective studies with greater sample sizes.

Thuasne clinical department - 28 February 2023