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Title: PILOT STUDY ON NOVEL LYMPHATIC TAPING TECHNIQUE – PUNCH TAPE.

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Keywords:

Lymphedema, Punch-Tape, Physiotherapy. Post-Mastectomy Lymphedema

Introduction:

Punch-tape is a type of Tape with holes in an asymmetric pattern that create different tension lines within the same piece of tape. This has a major effect on the superficial fascia, neuro-lymphatic system and analgesic response (endorphins), draining haematoma and edema.

Objectives:

To assess if the Punch-Tape treatment can be an alternative to the traditional treatments.

Method:

The patient participating in this study is a 61-year-old woman, who had modified radical mastectomy over four years ago. For the past four years, the patient has been using compression garments to address her lymphedema condition.

For this study the patient uses only use Punch Tape in her treatment, with the application repeated every 7 days.

The Punch-Tape application consists of three strips placed along the length of the affected arm in spiral. The first applied from the subclavian triangle, the second from the top of the shoulder and the last one from the posterior thoracic area, ending around the wrist and the hand.

The volume changes were evaluated using the Markowski formula:

$(\sum \text{pre-treatment circumference} - \sum \text{post-treatment circumference} \times 100 / \sum \text{pre-treatment circumference})$

And volume control of Kuhnke formula: $\text{Vol} = (C1^2 + C2^2 + \dots Cn^2) / \pi$

Results:

In the beginning of the treatment with Punch Tape, the sum of the measures of the circumferences has been evaluated in middle finger, hand, wrist, 5 cm over wrist,

forearm and 10, 15 and 20 cm over olecranon, was 177.9 and Markowski rate 1.03, after the eight weeks of Punch-Tape treatment, the results were: the sum of the measures of the circumferences was 171.6, and the Markowski rate was 3.54, Note that the largest reduction occurs in the edematous areas with respect to the healthy side.

Conclusion

The Punch-Tape in lymphedema is a completely new treatment. Despite the good results obtained, more lines of investigation must be opened to improve and optimize the use of this method, not only in lymphedema but in other edema related pathologies and circulation problems. The results indicate that the most edematous evolve more favorably to Punch Tape treatment, so you would think that in patients in the acute phase of edema evolution could be more responsive to Punch Tape treatment.