

Literature

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Abstract

BACKGROUND AND RATIONALE

Post thrombotic syndrome and lymphatic disease are a major source of oedema. Once developed, it becomes a chronic and substantial problem, with no ideal method of reduction. Manual drainage (MD) is frequently used but its efficacy, alone, is limited. The purpose of this study was to evaluate whether MD and HIVAMAT® 200 applied separately or simultaneously increase the reduction of oedema and to assess the relative merits of each treatment.

MATERIAL AND METHODS

From sept 1st to nov 30th 2007, 10 consecutive patients (3 males, 7 females; mean age 40 years, range 83 to 55 years) with unilateral old oedema (6 phleboedemas – PO – and 4 lymphoedemas - LO) of the lower limb were included in this study. MD and HIVAMAT® 200 were used twice: once separately, once simultaneously. The 16 min session of the 3 procedures were spaced in time by 15 min rest. The order of execution offered 6 possibilities and was at random permuted after each case. Using a Hg plethysmograph (SeriMed PL2) gauge fitted at 10 cm below the knee, relative volumetric variation was assessed continuously during all the study (108 min).

RESULTS

Whatever the technique, all limbs experienced a progressive calf reduction. Volumetric calf decrease reaches 0.0902 % Δ V/min manually, 0.0711 % Δ V/min by mean of HIVAMAT® 200 and 0.1568 % Δ V/min by mean of simultaneously methods. These data show that the combined method promote greater decongestion than the MD alone, MD decongestion whose is superior to the HIVAMAT® 200 alone. Our study failed to detect major differences between PO and LO, possibly related to the small number of subjects. Further studies in a larger number of patients are needed to clarify the involved mechanism and differences between methods.

CONCLUSION

This study suggests that the addition of HIVAMAT® 200 to the MD could improve treatment outcome in patients with old oedema of lower limbs. Subjects did not feel any discomfort. No adverse reactions were recorded.

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