Manual lymphatic drainage and additional physiotherapy in male breast cancer: a case-report

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Introduction: Male breast cancer (MBC) is a rare disease associated with delayed diagnosis and aggressive tumour therapy. Patients are often subjected to axillary lymph-node dissection, increasing the risk of secondary lymphoedema. Furthermore, shoulder joint restrictions, scar contraction, posture failures, sensitivity disorders or pain are common complaints as a result of the multi-targeted therapy.

Aims: The objective of this case-report was, if a treatment of manual lymphatic drainage and additional physiotherapy (PT) could influence oedema, shoulder range of motion (ROM) and function and the scar within an advanced MBC.

Method: The case of a 51-year-old patient with left upper-limb lymphoedema, shoulder joint restrictions, pain (axilla, phantom), and functional impairments after neoadjuvant chemotherapy, surgery, radiation and Tamoxifen therapy is described. He accomplished 20 therapy sessions of manual lymphatic drainage (MLD) and additional PT techniques aiming at shoulder range of motion and scar mobilization. He was educated to a self-applied scar therapy and received a customized home exercise program. Parameters measured were arm circumference, arm volume, shoulder ROM (flexion, abduction), the Vancouver Scar Scale, pain (NRS) and the SPADI questionnaire, respectively. Measurements were taken in the beginning (T1), after 10 sessions (T2) and after completing the therapy (T3).

Results: Arm volume was reduced by 265ml (T1–T3). After 20 sessions the volume of both arms was comparable (left: 3739, 8; right: 3700, 8ml). Pain was reduced by four points (axilla, 4/10) and one point (phantom, 5/10) NRS, respectively. Vancouver Scar scale improved by 3 points, mainly achieved through pliability enhancement. Shoulder ROM improved in both dimensions (flexion 25°, abduction 20°), but did not reach normal extents. The SPADI first deteriorated, followed by a subsequent improvement.

Conclusion: MLD and additional PT techniques could improve lymphedema and accompanying morbidities in a case of male breast cancer. Different techniques have to be selected and combined to meet the patient´s needs. Ongoing ROM restrictions can be attributed to radiation-induced tissue damages and pain-related avoidance behaviour. SPADI deterioration could be explained by over-exertion in close timely connection to T2 or an 'over-reporting of symptoms' related to the patient´s age, the variability of symptoms, male gender as well as a longer time-span between measurements. Lymph therapists should reflect on additional measurements to display more symptoms than volume change according to patients´ complaints.

References

Davies, C, et al. Interventions for breast cancer-related lymphoedema: clinical practice guideline from the academy of oncologic physical therapy of APTA. *Phys Ther* 2020; **100(7):** 1163–79