Predictive variables for a larger improvement of lymphoedema-specific quality of life 6 months after participations in an intensive multidisciplinary treatment programme (IMTP) in patients with lower limb lymphoedema

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Introduction: Complete Decongestive Therapy (CDT) provided by a multidisciplinary team is essential in the treatment of lower limb lymphoedema (LLL)¹. During the intensive phase of CDT, patients with LLL receive daily treatment with multilayer bandages, exercises, skin care and education. It has shown to have a positive effect on the health-related and lymphoedema-specific quality of life (QOL)². However, currently it is unknown which patients with LLL benefit the most of this IMTP.

Aims: To investigate in patients with LLL predictive variables for a larger improvement of lymphoedema-specific QOL 6 months after participation in an IMTP.

Methods: In this retrospective study, data were collected from patients with LLL, stage 2a, 2b or 3, who followed an IMPT during one to four weeks until maximal volume reduction and minimal pitting was achieved. Besides CDT, consultations by a dietician, social worker and psychologist were provided when necessary. After their participation in the IMPT, patients were instructed to perform self-management of lymphoedema through compression with a compression garment and/or bandages, skin care and performing exercises. If necessary, patients were further guided by a health care provider. All patients were evaluated at the start (baseline) and end of the IMTP and at 6 months follow-up. The change in QOL was assessed by difference of the total/ subdomain scores of the Lymph-ICF-LL questionnaire between 6 months follow-up and baseline. The following baseline predictive variables were investigated: (1) age; (2) gender; (3) BMI; (4) presence of lipoedema; (5) primary versus secondary LLL; (6) history of erysipelas; (7) swelling at the whole limb versus part of the lower limb; (8) duration of LLL; (9) score on six minute walking test; (10) presence of erosion of the skin; (11) cancer related LLL. Following predictive variables at 6 month follow-up were investigated: (12) whether or not to receive further physiotherapy treatment for LLL; (13) the number of days of wearing bandages the last month and (14) the number of days performing exercises the last month;

Results and conclusion: 259 patients with LLL were included in the analysis. From these 259 patients, 175 had bilateral LLL and 83 had unilateral LLL. Currently, bivariate and multivariate analyses are performed. The results will be presented during the ILF conference.

^{1.} Papadopoulou MC, Tsiouri I, Salta-Stankova R, Drakou A, Rousas N, Roussaki-Schulze AV, Giannoukas AD. Multidisciplinary lymphedema treatment program. Int J Low Extrem Wounds. 2012 Mar;11(1):20-7. doi: 10.1177/1534734612438436. Epub 2012 Feb 15. PMID: 22336900.

^{2.} Franks PJ, Quéré I, Keeley V, Tilley A, Liebl M, Murray S, Burian EA, Moffatt CJ. Quality of Life and Costs Within Decongestive Lymphatic Therapy in Patients with Leg Lymphedema: A Multicountry, Open-Label, Prospective Study. Lymphat Res Biol. 2021 Oct;19(5):423-430. doi: 10.1089/lrb.2021.0057. Epub 2021 Sep 28. PMID: 34582725.