

Physiotherapy after liposuction with skin excision (mLIPO) - case report

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Background

The upper limb lymphedema occurs in 20-30% of patients with breast cancer after the surgical treatment. Physiotherapy, including the complex decongestive therapy (CDT), is the main conservative treatment of lymphedema. Liposuction with skin excision (mLIPO) is one of the surgical treatments of lymphedema, which is used more often than others because of the lack of effectiveness of the conservative treatment. The addition of the adequate physiotherapy to the surgical treatment may be crucial for achieving long-term effects.

Material and methods

A 51-year-old female with breast cancer underwent a mastectomy with ALND, chemotherapy and radiotherapy (RT). The patient developed secondary lymphedema on the right upper limb (stage III) and was admitted for the modified liposuction with skin excision (mLIPO). The compression therapy (CT) with compression in the range of 23-40mm Hg (class 2) was started following the surgery and continued during the hospitalization and convalescence period (4 weeks). Then the patient was admitted for a 3-week rehabilitation in the Rehabilitation Unit of the Maria Sklodowska-Curie National Research Institute of Oncology Branch in Gliwice. We administered a physiotherapy program with the aim to improve the functionality of the upper limb and optimize the lymphedema. It included manual lymphatic drainage (SLD), compression therapy (CT), exercises improving muscle pump of the upper limb, myofascial release (MFR) (used to manage scar tissues on chest and upper limb), sensorimotor exercises (used to teach patient the correct position of the scapula).

Results

As a result of PT the range of movement (ROM) of the right shoulder joint improved (most noticeable in flexion: from 138° to 152° and abduction: from 139° to 165°). Significant pain reduction was reported (from 10 to 1 in VAS scale). We observed an increase in the muscle strength (improvement in the grip force was recorded using dynamometer). We managed to achieve the optimization of lymphedema (reduction in the arm and forearm circumferences > 2cm and better gliding of the fascia).

Conclusion

The physiotherapy after the surgical treatment of lymphedema using liposuction with skin excision increases the long-term effectiveness of this treatment and improves functionality of the upper limb.

Key words: lymphedema, liposuction, physiotherapy.