

The Efficacy of complete decongestive treatment and laser therapy in a male patient with advanced genital lymphedema

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Introduction: Genital lymphoedema is a challenging condition that causes long-lasting debilitating physical and social problems leading to impaired quality-of-life (QoL)¹. Herein we report a male patient with isolated peno-scrotal lymphedema who was successively treated with combined use of complete decongestive therapy (CDT) and laser therapy.

Methods: A 67-year-old male patient (BMI:24.2) was admitted to our hospital with complaints of swelling in the genital area, difficulty in walking and sexual activities, which were present for six years. His history included bladder cancer, chemotherapy and radiation therapy, as well as nodular goitre and vitamin D and B12 deficiency. On physical examination he had advanced peno-scrotal lymphedema with characteristic fibrotic, papillomatous skin changes, lymphatic cysts and lymphorrhea more prominent on the right side. According to the genital lymphedema severity scoring system² he had a score of 9. Medical treatments were arranged for skin changes and replacement therapy was provided for deficiency of vitamin D and B12. CDT consisting of skin care, manual lymphatic drainage, 2-layer bandaging (with Mobiderm and Coban) were applied for 3 weeks. Low-level laser therapy (LLT) with 25 Hz/10W/10J/cm³ intensity was added to the program. The circumference, length and depth of the scrotum were measured with a tape-measure before and after the treatment.

Results: After 3 weeks of CDT and laser therapy, the circumferential measurements of both scrotum and penis were decreased, skin changes were improved and lymphorrhea was ceased. The scrotum dimensions were 20cm, 58cm, 46cm before the treatment, while they were measured as 17cm, 51cm and 38 cm after 3 weeks of combined therapies. The GLS score was determined as 4. His difficulties in daily living activities were also regressed. He was consulted by plastic surgeons for excisional surgery but the patient declined surgery. Due to reimbursement conditions, he was discharged with a self-management program and custom-made pressure garment for the genital area. He was called for follow-up.

Conclusion: Our case report indicated that CDT and LLT were effective even in advanced, late-diagnosed peno-scrotal lymphedema. Education and training of health professionals in the management of genital lymphedema is needed to prevent delayed treatment which leads to physical and psychosocial disability and decreased QoL in this progressive condition.

References

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2. Yamamoto T, Yamamoto N, et al. Genital Lymphedema Score: Genital Lymphedema Severity Scoring System Based on Subjective Symptoms. Ann Plast Surg 201;77:119-21.