Patient education and rehabilitation after hip arthroplasty in thermal environmental

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Background and aim: Nowadays, some Spa centres are suitable for providing rehabilitative treatment in association with traditional Spa therapy. This study aims to evaluate the effectiveness of an intensive rehabilitation program after hip arthroplasty and its impact on quality of life.

Methods: Early after total hip arthroplasty for severe osteoarthritis (≤ 10 days after the intervention), 15 consecutive patients (6 males and 9 females) aged between 50 to 80 years were enrolled for this study. All the patients performed a two-weeks thermal multimodal rehabilitation program, which consisted of education and physical rehabilitative measures (two-hours and half/day session of land-based and aquatic therapy associated to physical therapy modalities (electrotherapy and low-level LASER-therapy). An educational program was also performed to both patients and families.

Both before and after the rehabilitation treatment patients underwent clinical evaluation, hip flexion/abduction range of motion and Pain Numerical Rating Scale. Harris Hip Score (HHS), and SF-12 questionnaires (Physical -PCS-12 - and mental health component -MCS-12) were also administered.

Results: After the two-weeks thermal Spa treatment, hip flexion/abduction improved significantly (p<0.05), but there was no statistically significant reduction in pain (p=0.350). The HHS score improved significantly from 62.6 ± 12.8 to 82.1 ± 12.7 (p<0.05), and the PCS-12 score from 36.3 ± 8.4 to 43.6 ± 8.9 (p<0.05).

There was no adverse event during Spa treatment.

Conclusion: After total hip arthroplasty, patients who underwent an intensive post-acute multimodal rehabilitation program showed an improvement in motor and functional recovery and a positive impact on quality of life. A comprehensive rehabilitation in thermal environment seems to be a good setting to do post-surgery hip rehabilitation.

References

1. Musumeci A, Pranovi G, Masiero S. (2018). Patient education and rehabilitation after hip arthoplasty in an Italian Spa centre: a pilot study on its feasibility. (in press Int J Biometeorol).

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- 2. Masiero S, Vittadini F, et al. The role of thermal balneotherapy in the treatment of obese patient with knee osteoarthritis. Int J Biometeorol 2017; DOI 10.1007/s00484-017-1445-7
- 3. Masiero S. Thermal rehabilitation and osteoarticular diseases of the elderly. Aging Clinical and Experimental Research 2008; 20 (3):189-94