



March 3rd to 6th Euganean Thermae and Padua, Italy

PADUA DAYS ON MUSCLE AND MOBILITY MEDICINE 2026

ABSTRACT N. 075

THERMAL MANAGERMENTS AND REHABILITATION IN MOBILITY MEDICINE REHABILITATION

## LECTURE: INTEREST OF THERMAL THERAPY FOR ADAPTED PHYSICAL ACTIVITY PRACTICE AND SPORT TRAUMA REHABILITATION

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Spa treatments can be beneficial for adapted physical activity during the cure and for the treatment of injured athletes. It offers a therapeutic environment in which movement, exercise, and recovery can be combined. A wide range of therapeutic orientations can include physical activity as part of a treatment protocol. Indeed, thermal spa treatment (TST) can be an opportunity to offer physical activities which are specifically adapted to patients. These programs particularly address conditions such as obesity, diabetes, lower limb arteritis, venous system diseases, osteoarthritis, neurodegenerative diseases (Parkinson's disease, Alzheimer's disease), fibromyalgia, long COVID-19, asthma, psychosomatic disorders. Activities can be practiced in an aquatic or non-aquatic environment. The importance of integrating physical activity into TST is reinforced by the fact that a sedentary lifestyle increases the risk of cardiovascular disease, type 2 diabetes, cancer (particularly colon and breast cancer), musculoskeletal disorders (MSDs), obesity, and negatively affects mental health. In particular, spa treatments using physiotherapy (swimming pool, massages, etc.), jet showers, pelotherapy (application of mud-packs) can help reduce inflammation and chronic pain (tendinitis, lower back pain, osteoarthritis) (1) and contribute to relaxation (2). Finally, additional therapeutic objectives such as smoking cessation can also be supported during a spa stay, complementing physical activity and improving long-term health outcomes. In the context of prevention and therapeutic education, TST will not only be an opportunity to encourage to take up a physical activity, but also to

motivate patients to continue practicing it after the cure treatment period. This contributes to patient therapeutic education by promoting lifestyle changes (3) - walking, swimming, cycling, or bed gym protocol (4), which helps maintain muscle tone and positively influences joint mobility - and, via the improvement or recovery that has been generated, to consider returning to physical activity that had previously been abandoned. TST can also be useful for rehabilitation following sports-related injuries, e.g. post-surgical rehab for anterior cruciate ligament rupture of the knee (5). Aquatic treatment results in faster recovery (enabling an earlier return to social, sporting, and professional activities), improves proprioception, and limits overcompensation on the limb contralateral to the operated limb (reducing the risk of osteoarthritis on the contralateral side). Musculoskeletal disorders caused by athletic performance can be treated in spa therapy, as well as prevented, and recovery after competition can also be facilitated. TST contributes not only to physical, but also to mental preparation. In many spa centers, the environment is well suited to sports activities (with equipped facilities), and sport coaches (specialists in adapted physical activities) can be integrated into the spa's care treatment team. Advice may also be given on the choice of sports equipment and protective gear (orthosis, lumbar belt...) which can contribute to the comfort and safety of participants (6). In conclusion, spa therapy offers personalised care using a multidisciplinary approach for both functional and overall health benefits.

**Keywords:** thermal therapy, adapted physical activity practice, sport trauma rehabilitation.