

Abstract

The paper deals with the comparison of different options for assessing the effect of physiotherapy aimed mainly at improving postural stability in adult patients. The theoretical part of the bachelor thesis defines postural stability, its optimal function in physiological situations and the most common pathologies. The clinical consequences of postural stability disorders and their treatment options are discussed. The most frequent consequence of insufficient postural stability is chronic low back pain (in the English literature "LBP"). The knowledge about the possibilities of clinical evaluation of the effect of physiotherapy is discussed. It is a subjective assessment by the patient, using PROM questionnaires (Patient-reported Outcome Measures) and DNS manual. Furthermore, the possibilities of objective assessment-dynamometry (DNS Brace device), Moiré and Pedoscan are described. The paper describes the principle of these devices and evaluates their advantages and disadvantages in clinical practice.

The practical part contains case reports of two patients with chronic LBP. The patients are evaluated with the above mentioned procedures before and after a series of six hourly therapies with weekly frequency. The therapy was performed at the Pavel Kolar Center for Movement Medicine under the guidance of a certified DNS therapist. The therapy consisted mainly of active exercises aimed at training optimal trunk stabilization; other techniques, especially mobilization and soft tissue techniques, were also used when necessary to ensure ideal execution of the exercises.

Based on the evaluation of therapists' examination methods, the DNS manual appears to be the most useful method for clinical practice. While for patients, it's DIERS Moiré.