## Abstract

This bachelor thesis in the form of research deals with the issue of vertebrogenic lumbar spine syndrome, its formation, examination and therapy and possibilities of objectification of therapy. The theoretical resumes the present knowledge of motor control, postural functions, spinal stabilization system and vertebrogenic lumbar spine syndrome. It also provides possibilities for therapeutic influence and objectifying physiotherapy.

The thesis also presents two case studies of vertebrogenic lumbar spine syndrome, which were examined with a new Ohm belt device that measures the strength of postural stabilization and abdominal wall activity. The parameters of spinal stabilization and the amount of activation of the abdominal wall were measured before and after treatment, and the results were compared. The subjective effect of therapy was evaluated by a standardized Oswestry questionnaire assessing pain and disability.

Measurement results in both patients in increased activation of the abdominal wall after therapeutic intervention. The result correlates with the subjective perception of therapy of reducing pain and alleviating disability in both patients.

## Keywords

vertebrogenic lumbar spine syndrome, spinal stabilization, objectification of therapy, Ohm belt, Oswestry questionnaire