AB1398-HPR THE EFFECTS OF KINESIOPHOBIA ON PAIN, FATIGUE SEVERITY, FUNCTIONAL EXERCISE CAPACITY, FUNCTIONAL STATUS AND QUALITY OF LIFE IN FIBROMYALGIA

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Background: Kinesiophobia play an important role in the development of chronic pain in Fibromyalgia (FM) patients. This condition lead to increase clinical symptoms and reduce quality of life.

Objectives: The aim of the study is to examine the effects of kinesiophobia on pain, fatigue, functional exercise capacity, functional status and quality of life in FM patients.

Methods: Twenty-one FM patients were evaluated. We used Tampa Scale of Kinesiophobia (TSK) for perception kinesiophobia, Visual Analogue Scale (VAS) for pain intensity, Fatigue Severity Scale (FSS) for fatigue, six-minute walk test (6MWT) for functional capacity, Fibromyalgia Impact Questionnaire (FIQ) for the functional status, and Short-Form Health Survey (SF-36) for quality of life.

Results: The results of this study, there was a strong correlation between TSK and VAS, FSS, physical and mental components of SF-36 ($r=0.754$, $r=0.762$, $r=0.780$, and $r=0.843$, respectively; $p<0.05$). There was a moderate correlation between TSK and FIQ and 6MWT ($r=0.695$, $r=0.510$, respectively; $p<0.05$).

Conclusions: The results of the present study indicate that kinesiophobia can adversely affect pain, fatigue, functional status and functional exercise capacity, which is result in impaired quality of life in FM. Further, it demonstrates kinesiophobia can be a clinically appropriate assessment to evaluate patients and to determine the effectiveness of treatments in FM.

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AB1399-HPR CONCURRENT VALIDITY AND STABILITY OF SUBGROUP ASSIGNMENT TO THREE LEVELS OF PAIN CONDITION SEVERITY IN PATIENTS WITH MUSCULOSKELETAL PAIN

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Background: Pain screening instruments have been used to identify risk factors for poor prognosis and are recommended for the stratification of treatment for musculoskeletal pain.

Objectives: The aim of this study was to investigate the concurrent validity of subgroup assignment based on the Örebro Musculoskeletal Pain Screening Questionnaire compared with reference instruments: The Pain Disability Index, the Tampa Scale for Kinesiophobia, and the Pain Catastrophizing Scale. A secondary aim was to investigate the stability of the subgroup assignment over a defined period of time.

Methods: Participants ($n=40$) aged 18–65 years were recruited from five primary health care centres in Sweden. Data were collected using self-reported questionnaires. The subgroups based on the Örebro Musculoskeletal Pain Screening Questionnaire were pre-defined to low, moderate or high pain condition severity. The reference instrument data were dichotomized into low or high level based on previously used cut-off scores. Concurrent validity was analysed with Fisher's exact test. Stability was calculated using quadratic-weighted kappa analysis.

Results: The results indicated acceptable psychometric properties of the subgroup assignment based on the Örebro Musculoskeletal Pain Screening Questionnaire regarding concurrent validity, and the stability ($K_w=0.51$, 95% CI: 0.22–0.81) over two to three weeks. To further increase validity, it is suggested that subgroup assignment is complemented with other measures assessing e.g. pain catastrophizing.

Conclusions: In conclusion, assignment to subgroups with low, moderate and high levels of pain condition severity based on the Örebro Musculoskeletal Pain Screening Questionnaire, could be used as a valid basis for stratified treatment for patients with musculoskeletal pain.

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AB1400-HPR MUSCLE QUALITY INDEX IN OBESE SUBJECTS WITH HIP OSTEOARTHRITIS

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Background: Obese older adults with hip osteoarthritis suffer a progressive loss of neuromuscular function affecting their activities of daily living.

Objectives: The objective of this study is to determine the behaviour of the muscular quality index in obese subjects with osteoarthritis and to compare the manifestations of strength and anthropometric variables with control subjects.

Methods: Thirty-two subjects (4 men and 28 women, 66.2 ± 5.2 years of age, 159.2 ± 7.5 cm, 71.5 ± 11.7 kg) were evaluated. 14 subjects suffered osteoarthritis. Muscle circumference, limb length, body mass and sit and stand test were evaluated, in addition to the maximal voluntary isometric contraction in hip flexion and extension movements.

Results: The osteoarthritis group presented obesity ($p=0.037$). The muscle quality index of the osteoarthritis group correlated with the weight ($p=0.776^{**}$), with maximum peak strength in flexion ($p=0.552^{*}$) and average maximal strength ($p=0.574^{*}$). In the control group the muscle quality index correlated with: weight ($p=0.689^{**}$), muscle circumference ($p=0.571^{*}$), maximum peak strength in extension ($p=0.534^{*}$), average peak strength in extension ($p=0.523^{*}$), average maximal strength in extension ($p=0.509^{*}$) and maximum impulse in extension ($p=0.508^{*}$).

Conclusions: The muscle quality index is a useful tool to measure muscle quality in the healthy population, but is not clear enough for obese subjects with osteoarthritis, so it is necessary to perform future studies to determine their behaviour.

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