Osteoarthritis

Oral communications

CO30-001-e
Update on Physical and Rehabilitation Medicine management of osteoarthritis
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Keywords: Osteoarthritis; Evidence-based; Physical and rehabilitation medicine interventions

Osteoarthritis (OA) is the most common joint disorder and the major cause of chronic musculoskeletal pain and mobility disability in elderly populations. The prediction is that it is going to be the fourth leading cause of disability by the year 2020. The goal of the Physical and Rehabilitation Medicine (PRM) management of osteoarthritis is to reduce the impact of OA on the individual by reducing pain and improving function, activities and participation. The optimal management requires the combination of both pharmacological and non-pharmacological interventions. The most recent guidelines and meta-analysis of randomized control trials indicate good level of evidence about the effectiveness of PRM interventions in OA: high level of evidence about education, weight reduction and exercise and growing evidence about the effectiveness of physical modalities. The demonstrated effectiveness of a large number of PRM interventions and evidence based recommendations for PRM interventions enhance the role of PRM specialists in providing management of OA.

Further reading

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Evaluation of the improvement of life quality in patients with unicompartmental femoro-tibial gonarthrosis appareled with a discharging orthesis
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Keywords: Femoro-tibial gonarthrosis; GII Ossür; Unicompartmental discharging orthosis; KOOS

Aim.– To evaluate the improvement of life quality on patients appareled with a discharging orthosis (Ossür GII).

Material and methods.– Thirty patients were included in this prospective study. Average age of the patients was 56.4 years and average BMI was 28 kg. Orthesis used has articulated three-point system with valgusing constraints made after virtual molding by optic scanner (fast scan) then with an acquisitioned data
The effects of experimental knee joint effusion on quadriceps corticmotor excitability, intracortical excitability and the cortical silent period

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Aim. -- Quadriceps are often required to perform tasks in which there is a risk of knee joint effusion, such as during physical activities. The aim of this study was to evaluate the effects of experimental knee joint effusion on quadriceps corticmotor excitability, intracortical excitability and the cortical silent period.

Methods. -- Transcranial magnetic stimulation was used to measure quadriceps corticmotor excitability, intracortical excitability and cortical silent period before and after the induction of experimental joint effusion in 17 healthy volunteers. Experimental joint effusion was induced by injecting dextrose saline into the knee joint to a standardized intra-articular pressure of 50 mmHg.

Results. -- Quadriceps corticmotor excitability increased significantly following experimental knee joint effusion (P < 0.05), while the duration of the cortical silent period decreased (P < 0.05). There was no change in short interval intracortical inhibition or intracortical facilitation (P > 0.05).

Conclusions. -- The results of this study provide evidence that experimental knee joint effusion may cause a decrease in GABA-mediated inhibition and an increase in excitability of quadriceps corticmotor neurons.

Keywords: Quadriceps; Knee injury; Arthritis; Corticmotor; Effusion

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