

Reliability of an isometric knee test in women with fibromialgia using the 12-week test-retest [Fiabilidad de un test isométrico de rodilla en mujeres con fibromialgia mediante test-retest de 12 semanas]

Olivares P.R.

Pérez-Sousa M.A.

Del Pozo-Cruz B.

Delgado-Gil S.

Domínguez-Muñoz F.J.

Parracab J.A.

Objective: The aim of this study was to analyze the reliability of peak torque assessed using an isometric strength protocol of knee flexor and extensor muscles. **Material and methods:** A total of 16 women with Fibromyalgia (FM) (aged 54.9 ± 12.1) participated in this study. The design consisted of a 12-week test-retest, and isometric peak torque was assessed using an isokinetic dynamometer (Biodex system 3). The evaluation consisted of 3 maximal isometric contractions of knee extensor and flexor muscles. Relative (intraclass correlation coefficient ICC) and absolute (standard error of measurement SEM and smallest real difference SRD) reliability indices were calculated. **Result and conclusions:** Isometric peak torque assessed using isokinetic dynamometer is reliable in knee flexor and extensor muscles. This study presents data on the smallest real difference of peak torque in isometric actions of knee flexor and extensor muscles, which can help interpreting results obtained in physical activity based therapies in individuals with FM of several weeks duration. © 2013

Asociación Colombiana de Reumatología.

Fibromyalgia

Isometric dynamometry

Muscle strength

Reliability

Reproducibility

adult

Article

biomechanics

clinical article

dynamometer

dynamometry

extensor muscle

female

fibromyalgia

flexor muscle

human

isometric peak torque

knee extensor muscle

knee flexor muscle

measurement error

muscle isometric contraction

test retest reliability

torque