Original Paper

Effect of reconstruction surgery on hamstring reflex in patients with anterior cruciate ligament tear in acute phase

Majdoleslam B (PhD)[1], Salavati M (PhD)[2], Ebrahimi E (PhD)[3], Kazemi M (MD)[4] Esmaeiljah AA (MD)[4], Baghaei Roodsari R (MSc)*[5]

[1]Assistant Professor, Department of Physical Therapy, University of Social Welfare and Rehabilitation, Tehran, Iran. [2]Associate Professor, Department of Physical Therapy, University of Social Welfare and Rehabilitation, Tehran, Iran. [3]Professor, Department of Physical Therapy, University of Social Welfare and Rehabilitation, Tehran, Iran. [4]Assistant Professor, Department of Orthopedic Surgery, Shahid Beheshti University of Medical Sciences, Tehran, Iran. [5]MSc in Orthotics and Prosthetics, Department of Orthotics and Prosthetics, University of Social Welfare and Rehabilitation, Tehran, Iran.

Abstract

Background and Objective: Anterior cruciate ligament (ACL) tear is one of the most common injuries at knee joint. This study was done to evalute the effect of reconstruction surgery on hamstring reflex in patients with ACL tear.

Materials and Methods: In this Quasi- experimental study, 30 patients (16 males, 14 females) with ACL tear, with mean age of 26.52±8.72 years old were recruited during 2007. Patients were selected in a non probability sampling manner. The Kinsiological Electromyography and trauma mechanism were used for testing the hamstring reflex. Muscle activity were measured as a dependent variable. Data were analyzed with Paired T-Test, ICC, SEM and K-S tests.

Results: Hamstring reflex in affected knee and after reconstruction surgery was 73.25±3.22 and 47.35±3.85, respectively. This difference was significant ($P<0.05$).

Conclusion: Reconstruction surgery in patients with ACL tear at acute phase is effective in improvement of hamstring reflex.

Keywords: Hamestring reflex, Reconstruction surgery, ACL, Muscle activity

*** Corresponding Author: Baghaei Roodsari R (MSc), E-mail: r.baghaei1375@yahoo.com**

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