Original Paper

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

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Abstract

Background and Objective: Anterior cruciate ligament (ACL) tear is one of the most common injuries at knee joint. This study was done to evaluate 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 Kinesiological 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: Hamstring reflex, Reconstruction surgery, ACL, Muscle activity

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