

## Comparison of kinesthesia in patients with anterior cruciate ligament tears before and after reconstructive surgery at acute phase

B. Majdoleslam      M. Kazemi\*\*      S. Keyhani\*\*  
A.A. Esmailjah\*\*      R. Baghaei\*\*\*

\*Assistant Professor of Physical Therapy, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

\*\* Assistant Professor of Medical Faculty, Shaheed Beheshti University of Medical Sciences, Tehran, Iran

\*\*\*MSc. of Orthotics and prosthetics, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

### \*Abstract

**Background:** Recognition of kinesthesia impairs after anterior cruciate ligament (ACL) tear and reconstruction surgery can significantly improve the situation.

**Objective:** The objective of the present study was to compare the Kinesthesia in patients with ACL tear before and after reconstruction surgery at acute phase.

**Methods:** In this Quasi- experimental study, 30 patients with ACL tear were recruited. The patients included 16 males and 14 females selected in a non probability sampling manner. The C.P.M, as a dependent variable, was used to test the Kinesthesia motion sense. Data were analyzed using paired t-test, ICC, SEM, and K-S tests.

**Findings:** The kinesthesia in the affected knee and at the speed of 0.5 m/s before and after surgery was  $5.02 \pm 0.36$  and  $3.23 \pm 0.25$  and at the speed of 2 m/s  $1.95 \pm 0.16$  and  $0.85 \pm 0.04$ , respectively. The difference between the pre- and post-surgery was significant at both speeds employed ( $p < 0.05$ ).

**Conclusion:** It seems that the reconstructive surgery in patients with ACL tears at the acute phase is of high value in improving the kinesthesia.

**Keywords:** Reconstructive Surgery, Kinesthesia, ACL

**Corresponding Author:** Roshanak Baghaei, orthotics and prosthetics department, University of Social Welfare and Rehabilitation, Tehran, Iran

**E-mail:** r.baghaei@gmail.com

**Tel:** +98-21-22180010

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