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

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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±0.36 and 3.23±0.25 and at the speed of 2 m/s 1.95±0.16 and 0.85±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

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