

Surgical Treatment of Acute Traumatic Knee Dislocation

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Introduction

The purpose of this study was to determine the effectiveness of two stage surgical approach for treating acute traumatic knee dislocation.

Material and Methods

The study involved 15 knees in 14 patients treated between October 1997 and November 2001. The mean follow-up was 24 months. In the first surgical stage, medial collateral ligament with posteromedial corner and/or lateral collateral ligament with posterolateral corner were repaired or reconstructed within two weeks of injury. In the second surgical stage, after full range of motion was obtained, anterior and posterior cruciate ligaments (ACL and PCL) were reconstructed if significant laxity was present. The final outcomes were assessed using stress X-rays, range of motion and Lysholm score.

Result

There were 10 cases of medial collateral ligament (MCL) tear and 8 cases lateral collateral ligament (LCL) tear. All MCL and LCL injuries were either repaired or reconstructed. All cases had both ACL and PCL tears. Following the first stage MCL / LCL surgery, the second stage surgery involving ACL and PCL reconstructions was necessary in 3 and 7 cases, respectively. 5 cases did not require ACL / PCL reconstruction. For the stability of ligament at final follow-up, MCL, LCL, ACL, and PCL instability were graded as 0~1 in 15, 14, 15 and 11 cases, respectively. PCL instability was grade 2 in 4 cases. The mean postoperative Lysholm score was 87.6 points.

Conclusion

The two stage surgical approach described here resulted in good outcomes for acute knee dislocation patients in terms of range of motion and stability. This approach, which involves a first stage of collateral ligament complex repair or reconstruction and then a second stage of cruciate ligament reconstruction if necessary, is recommendable for the treatment of acute traumatic knee dislocation

Key word: Acute knee dislocation, Two stage surgical approach