ISAKOS

International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine

10th Biennial ISAKOS Congress • June 7-11, 2015 • Lyon, France

Paper #146

Patient-Based Outcomes after Medial Patellofemoral Ligament Reconstruction

Takehiko Matsushita, MD, JAPAN
Ryosuke Kuroda, MD, PhD, JAPAN
Shinya Oka, MD, PhD, JAPAN
Tomoyuki Matsumoto, MD, PhD, JAPAN
Koji Takayama, MD, PhD, JAPAN
Yuichi Hoshino, MD, PhD, JAPAN
Daisuke Araki, MD, PhD, JAPAN
Masahiro Kurosaka, MD, JAPAN

Department of Orthopaedic Surgery, Kobe University Graduate School of Medicine
Kobe, JAPAN

Summary:
Overall patient-based outcomes after medial patellofemoral ligament reconstruction were satisfactory in most of the patients with recurrent patellar dislocation. However not few patients had increased pain and pain appears to be the most frequent complications after MPFL reconstruction.

Abstract:

INTRODUCTION
The medial patellofemoral ligament (MPFL) is a primary restraint in lateralization of the patella. Therefore MPFL reconstruction have been recently widely performed to treat patients with patellar instability and relatively good results, including low dislocation rate and low complications, have been reported. However patients-based subjective outcomes after MPFL reconstruction have not been well examined. In this study, we assessed both objective and patient-based subjective outcomes after MPFL reconstruction.

MATERIALS AND METHODS
Seventy-three knees in 65 patients who received MPFL reconstruction for recurrent patellar dislocation were examined with a minimum follow-up of 2 years (mean follow up; 41 months). Surgical indication includes all patients with recurrent patellar dislocation regardless of predisposing factors. Semitendinosus tendon was used for the graft. Two suture anchors were used for the patellar graft fixation and an interference screw was used for the femoral graft fixation. Lateral release was performed on 41 knees. For objective assessments, the Crosby and Insall grading system, presence of patellar redislocation and apprehension sign were evaluated. Additionally the congruence angle and Insall-Salvati ratio were measured on plain radiographs. To assess patient-based outcomes, questionnaires for knee Injury Osteoarthritis Score (KOOS) and Kujala score were sent to the patients.

RESULTS
No patients reported redislocation after surgery. Apprehension remained in 6 knees (8%). With the Crosby and Insall evaluation system, 29 knees (40%) were excellent, 41 knees (56%) were good and 3 knees (4%) was fair to poor. None of the knees were worse. The congruence angle and the Insall-Salvati ratio were significantly improved after surgery. 46 patients answered questionnaires. The mean Kujala score was significantly improved postoperatively. The mean KOOS score was also significantly improved postoperatively in all five subscales, Pain, Symptom, ADL, Sports/Recreation and QOL. Further the mean scores of 41 questions out of 42 questions for the KOOS score were significantly improved after surgery but the mean score of the question about “grinding and clicking” was not significantly changed. When the KOOS scores of the patients were assessed individually, one or more subscales out of the five subscales were worsened postoperatively in 10 patients (21%). All the 10 patients were female and had

Paper #146

decreased postoperative Pain subscale scores. Further those 10 patients who had one or more worsened postoperative subscales were compared with patients without any worsened subscales. There was no statistically significant difference between the groups in age, plain radiographic parameters and ratio of the presence of cartilage injury in the PF joint.

CONCLUSION
MPFL reconstruction improved objective clinical and radiographic assessments in patients with recurrent patellar dislocation. In addition, overall satisfactory patient-based outcomes were obtained in most of the patients. However not few patients had increased pain after surgery. Pain appears to be the most frequent complications after MPFL reconstruction and it should be informed to patients as a possible complication. In future, factors and causes of the increased pain needs to be explored.