ISAKOS

International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine

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

Paper #50

Arthroscopic All-Inside Reconstruction for Popliteus Tendon: Clinical Results of Minimum 2-Year Follow-Up

Hui Zhang, MD, CHINA
Hua Feng, MD, CHINA

Beijing Jishuitan Hospital
Beijing, Beijing, CHINA

Summary:
Combined with posterior cruciate ligament reconstruction, arthroscopic all-inside anatomical posterolateral corner reconstruction of the popliteus tendon could restore the posterolateral rotational stability of the knee.

Abstract:
PURPOSE
The purpose of this study was to describe a one-stage operation for posterior cruciate ligament reconstruction with use of an Achilles tendon-bone allograft and a posterolateral corner reconstruction of popliteus tendon reconstruction based on our previously described technique, and evaluates the clinical outcomes at a minimum 2-year follow-up.

METHODS
Our study included 19 patients who had undergone posterior cruciate ligament reconstruction with use of an Achilles tendon-bone allograft and posterolateral corner reconstruction with arthroscopic anatomical reconstruction of popliteus tendon with use of a tibialis posterior tendon Patients were assessed for knee instability with use of the dial test at 30_ and 90_, together with posterior stress radiography.

RESULTS
At the two-year follow-up evaluation, 15 showed improvement on the tibial posterior translation (13.51 ± 4.53mm vs. 4.41 ± 3.88mm, p=0.000) measured by stress view, the anterior-posterior translation (11.21 ± 3.24mm vs. 2.57 ± 3.11mm, p=0.000) measured by KT-1000, the dial test (15.47° ± 5.41° vs. -1.16° ± 10.43°, p = 0.000). The Lysholm score was improved from 49.3 ± 8.8 preoperatively to 70.3 ± 8.3 postoperatively (p= 0.000). The International Knee Documentation Committee grades were: 11 patients were grade D and 4 were grade C preoperatively, improved to 5 were grade A, 5 were grade B, 4 were grade C and 1 was grade D postoperatively. The final flexion loss was 3.33° ± 4.88° (range from 0° ~ 15°).

CONCLUSIONS
Combined with posterior cruciate ligament reconstruction, anatomical posterolateral corner reconstruction of the popliteus tendon showed better outcomes. This study demonstrated that anatomical posterolateral corner reconstruction is a reliable alternative method in addressing posterolateral corner and posterior cruciate ligament insufficiency of the knee, a finding that ideally should be tested in a randomized controlled trial.