Rigidfix 와 Infrafix 로 고정한 슬괵건을 이용한 전방 십자인대 재건술 후 경골터널의 확장

Department of Orthopaedic Surgery, Eulji Medical Center, Seoul, Korea

Nam-Hong Choi, M.D., and Yoo-Hoon Jung, M.D.

The purpose of this study was to evaluate tibial tunnel widening prospectively after anterior cruciate ligament (ACL) reconstruction with hamstring tendon grafts using Rigidfix (DePuy Mitek, Raynham, MA) femoral fixation and Intrafix (DePuy Mitek) tibial fixation. 56 consecutive patients who underwent ACL reconstruction with a minimum of 2 years' postoperative evaluation were reviewed. On the anteriorposterior (AP) and lateral radiographs, the diameter of the tibial tunnel was measured at proximal, middle, and distal positions and the shape of the tibial tunnels were classified. Tunnel widening was defined as widening of greater than 2 mm. Group I was defined as cases with no tunnel widening and group II defined as cases with tunnel widening. Postoperative laxity evaluations were performed using Lachman test, pivotshift test, and Instrumented laxity testing using the KT-1000 arthrometer. On the AP radiographs, the average diameter of the tibial tunnel increased 8.8% at 6 months and 8.5% at 12 months postoperatively compared to the immediate postoperative day. On the lateral radiographs, the average diameter of the tibial tunnel increased 7.2% at 6 months and 8.1% at 12 months year postoperatively compared to the immediate postoperative day. The tunnel shape evaluation revealed predominantly linear type in 53 patients (95%). Group I was 42 patients (75%) and group II was 14 (25%). The average KT-1000 measurement was 1.0~1.8 mm in group I and 2.1~2.8 mm in group II (p>0.05) The Lachman and pivot-shift showed tests no significant differences between the two groups. In conclusion, hamstring ACL reconstruction using Rigidfix and Intrafix fixation showed less widening of the tibial tunnels than observed in previously published studies.