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## Clinical Results of ACL Reconstruction with Hamstring Tendon

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### **Purpose**

To evaluate the clinical results after anterior cruciate ligament(ACL) reconstruction using hamstring tendon with Ligament Anchor(LA) screw, which is newly designed for fixation of graft into femur.

### **Materials and Methods**

58 patients who were followed up at least more than 2 years after ACL reconstruction with 4 strands of semitendinosus and gracilis were included in this study. The graft was fixed with LA screw at femoral tunnel and with bioabsorbable interference screw at tibial tunnel. The average period of follow-up was 28 months. The clinical results such as physical examination and Lysholm Knee score and widening of bony tunnel and instrumented anterior laxity test with Telos were evaluated.

### **Results**

The Lysholm knee score was 60.0 in average preop. and improved to 94.0 in average at follow up. On the Lachman test, there were mild(+) instability in 16 cases, moderate(++) in 24, severe(+++) in 18 preoperatively. 50 cases were converted to negative and 8 to mild at follow up. On instrumented anterior laxity test with Telos, side to side difference on 20 lb was 12.9mm in average preop., and was decreased to 4.5mm in average at follow-up. The femoral tunnel was widened from 10.6mm preop. to 12.7mm(21.1%) at follow up on AP plane and from 10.7mm to 12.4mm(16.5%) on LAT plane. Tibial tunnels was also widened from 9.8mm to 11.8mm(20.7%) on AP plane and from 9.9mm to 11.7(18.9%) on LAT plane. Complications were: anterior knee

crepitus in 17 cases, quadriceps muscle atrophy(>3cm) in 6, penetration of screw over the lateral femoral cortex in 5 ; saphenous nerve paresthesia in 2.

### **Conclusion**

ACL reconstruction with hamstring tendon and LA screw was one of the choice of graft and fixatives in restoring knee stability and in improving clinical results with little complications such as anterior knee pain and excessive widening of bony tunnel.