Purpose

To present that the femoral tunnel for the anatomical single bundle ACL reconstruction can be created through tibial tunnel.

Surgical Technique

Notchplasty was seldom performed to preserve the “lateral intercondylar ridge”. After identification of the insertion sites of the anteromedial and posterolateral bundles posterior to the lateral intercondylar ridge, a femoral tunnel-marking was made in between. To make a tibial tunnel, the drill guide was set at 40–45 degrees and the intra-articular guide tip, antero-medial to the center of the ACL footprint. The starting point for the guide pin on the proximal tibia was proximal to the pes anserinus and anterior to the medial collateral ligament. With varus and internal rotation of the tibia, the femoral guide pin could be easily adjusted to the femoral tunnel-marking to create a transtibial femoral tunnel.

The femoral side of the graft was fixed with RIGIDfix cross pin and the tibial side, with a bioabsorbable interference screw and a screw and spiked-washer with the knee in extension.

Conclusion

We introduced a simple and reproducible technique of anatomical single bundle ACL reconstruction which addresses both anteromedial and posterolateral bundles.