

Minimum Two-Year Outcomes of ACL Reconstruction Associated with Bimeniscal Repair

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Summary:

The prognosis for the ACL reconstruction associated with bimeniscal repair is bad with a higher risk of graft rupture, despite a good initial control of the anterior laxity

Abstract:

Purpose:

To evaluate comparative results of ACL reconstructions with either bimeniscal repair, meniscal repair, or no meniscal surgery. The hypothesis was that functional results are worse in the bimeniscal repair group.

Material and methods : This is a retrospective comparative study of patients undergoing ACL reconstruction with bone-patellar tendon-bone autograft included between May 2009 and May 2013. Among 469 consecutive ACL reconstructions, 15 patients had a bimeniscal repair.

All of them were matched with 30 patients with ACL reconstruction and one meniscal repair, and 30 patients with ACL reconstruction without meniscal surgery. These three subgroups were comparable concerning age, sex, type of sport, Tegner score, time between injury and surgery, BMI.

At a minimum of 2 years of follow-up (2-5), patients were clinically evaluated by KOOS, Lysholm and IKDC scores, side-to-side anterior knee translation (Telos and GNRB).

Results : The incidence of bimeniscal repair with concomitant ACL reconstruction was 3,2%.

ACL rerupture was 6 times greater in the bimeniscal repair group (20%, 3 patients), when compared with the other groups (3.3% in each, p=0.06).

Postoperative functional scores (KOOS, Lysholm, IKDC) were as follows: 81.9, 82.3 and 71.3 in the isolated ACL reconstruction group, 86.7, 89.3, 84 in the group with one meniscal repair, 85.8, 84.3, 78 in the ACL+bimeniscal repair (ns).

Mean injured to non-injured difference in anterior laxity by Telos was 3.3mm (SD 2.2) in the bimeniscal repair group, 2.0mm (SD 1.5) in the meniscal repair group, 1.5mm (SD 2.0) in the isolated ACL reconstruction group (ns).

There were 2 secondary meniscectomies after failed meniscal repair in the group of meniscal repair (6.7%), none in the other groups.

Conclusions :

ACL lesion in association with repairable lesions of the two menisci is a rare entity. The prognosis for the ACL reconstruction associated with bimeniscal repair is bad with a higher risk of graft rupture, despite a good initial control of the anterior laxity. The meniscal prognosis is good (low rate of reoperations for meniscectomies). Return to sports activities should be done with caution in these patients.