

ACL RECONSTRUCTION IN PROFESSIONAL ATHLETES USING LARS ARTIFICIAL LIGAMENTS

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INTRODUCTION: To present our 4 years results of ACL reconstruction using the new generation free fibers LARS artificial ligament.

MATERIAL AND METHODS: Between May 1997 and May 1999 we selected 100 patients (professional athletes) who had isolated ACL rupture. One orthopaedic surgeon performed the surgery using purely arthroscopic surgical technique with the aim of an Image Intensifier for the precise drill guide placement.

67 were acute (less than 3 weeks) 29 were chronic (1 month to 5 years) and 4 were revisions from autogenous grafts.

73 were male and 27 female.

The mean age of the patients was 27 years (Range 18 to 42).

The postoperative rehabilitation protocol was vigorous and the patients were able to return to full contact sports in less than 2 months.

We evaluated all the patients at 2, 6, 12, 24, 36, 48 and 60 months, radiographically, subjectively (pain and stability according to IKDC form and a modified Noyes Questionary), objectively (Nouli-lachman test, Pivot shift), Instrumented laxity (KT-2000, Kin-Com Computerized Dynamometer and Neurocom Balance System).

For statistical analysis, we used two-sided test to compare the difference in the level of activity before injury, between injury and surgery and after surgery.

RESULTS:

IKDC evaluation: A 74%, B 15%, C 8%, D 3%.

KT-2000 the mean side to side difference was <2,6mm.

NOULIS-LACHMAN TEST: <3mm 80%, 3 to 5mm 15%, >5mm 5%.

PIVOT SHIFT: Negative 92%, Slightly positive 8%.

RADIOGRAPHICALLY: In some cases we observed mild degenerative changes.

Full extension was achieved in all the patients and flexion averaged 135 degrees.

Complications: There were 3 ruptures (1 due to anterior femoral tunnel placement causing impingement and 2 due to new injury), 4 failures of femoral fixation requiring retension of the graft and 1mm large diameter screw. There were no case of synovitis.

CONCLUSION:

The purpose of this study were to indicate that the Lars artificial ligament is a safe and ideal graft with high patient satisfaction for acute and chronic acl deficient knee if there is a well vascularized stump and early return to sports is required.

348

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