

Original article

Patient satisfaction needs as related to knee stability and objective findings after ACL reconstruction using the LARS artificial ligament

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Abstract

The purposes of this study are to compare patient satisfaction with the objective measurement of knee stability and assess early complications following ACL reconstruction using a LARS artificial ligament. Forty-seven patients were reviewed 8–45 months after surgery. Assessment was made by the Knee and Osteoarthritis Outcome Score for patient satisfaction, a modified International Knee Documentation Committee form for clinical knee stability, and a Telos stress radiography for PA stability. Complications were assessed at interview and were double-checked with charts. The LARS artificial ligament may be a suitable device to reconstruct an ACL tear. Documenting mechanical stability of the knee is inadequate when reporting follow-up studies and a questionnaire assessing patient satisfaction should be added to provide a better picture of the outcome and results. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

In the young and active population with an ACL tear, reconstruction is often the best therapeutic option. Several researchers have developed different ACL substitutes to meet clinical needs. The patellar bone-tendon-bone autograft is widely reported in the literature as one of the best solutions for ACL replacement [1–5]. When this graft is successful, the implant undergoes 'ligamentization', being slowly revascularized after approximately 6 weeks and pre-

senting most histological and functional properties of the ACL after 30 weeks [2]. Some pain, loss of motion, knee instability and other problems, however, may be associated with this technique [6–9]. This situation stimulated interest in the use of artificial ligaments to replace the ACL.

After a preliminary period of enthusiasm and intensive clinical use of artificial ligaments for intra-articular ACL reconstruction in the 1980s, most surgeons gave up prosthetic ligaments due to the high device failure rate. Our research group provided evidence that under certain conditions an artificial ACL reconstruction can be successful [10–16]. The ligament must be made of polyester, the intra-articular part must be a multifilament strand and the surgical technique must minimize 3D stress on the ligament. The

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