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Comparison of results of ACL reconstruction using LARS method and autogenous ST/GR graft.

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Abstract

PURPOSE: The objective of the study was assessment of the function of the knee joint after ACL reconstruction using the LARS method and autogenous graft. The study was of a retrospective character and included 96 patients who had undergone reconstruction of the torn ACL. The study was conducted within 36-48 months after surgery.

METHODS: In order to compare the results of the ACL reconstruction performed with 2 types of grafts, the following instruments were used: Lysholm Knee Scoring Scale, SF 36v2 questionnaire for assessment of health-related quality of life, and Biodex System 4 for isokinetic muscle testing.

RESULTS: No differences in the evaluation of the quality of life measured using SF 36v2 questionnaire were observed between the LARS and ST GR groups. Using the Lysholm Scale, the distribution of knee function scores was compared according to the type of surgery. There are no grounds to confirm the differences in the distribution of knee function scores considering the type of graft ($p = 0.756$). Isokinetic test showed a significant weakening of muscle strength in the operated limb, compared to the strength of the healthy limb.

CONCLUSIONS: The type of graft used for ACL reconstruction does not exert an effect on the quality of life of patients or the level of their knee joint function. Extensor and flexor muscles strength of the knee joint was lower in the operated limb, irrespective of the type of graft used. Weak relationships were observed between the level of knee joint function and extensor muscle strength of this joint.

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