

Evaluation of Sensory Complications in ACL Reconstructive Surgery Using Hamstring Graft in Vertical and Oblique Incisions

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Abstract

Background and Objectives: In order to evaluate whether oblique or vertical incision has less neurological complications in hamstring ACL reconstruction. The following study was done.

Materials and Methods: In a prospective randomized study 70 patients who were candidates for hamstring ACL reconstruction and divided into two groups. In the first group vertical incision was done and in the other group oblique incision was performed. Patients were followed every 2 months and a questionnaire which was designed for the study was answered by patients. Topography and distribution of sensory deficit were also scrutinized.

Results: 71% of patients with oblique incision had neurological deficit and 89% with vertical incision group had neurological deficit. Patients with oblique incision, 26.5% were in stage 0, 20.5% stage 1, 41.3% stage 2 and 29.4% were in stage 3. In vertical incision group 0, 51% of patients were in stage 1, 22.9% stage 2, and 11.4% stage 3 (normal).

Conclusion: Oblique incision has lower neurological complication than vertical incision. Sensory impairment was detected in mild incision group in supralateral and inferomedial of calf in 40% and 14% respectively. Above complication was detected in 0.66 and 0.83 percent in aforementioned region in vertical incision group.

Keywords: Anterior cruciate ligament, Incision, Reconstruction

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