

Partial Meniscus Substitution with a Polyurethane Scaffold Does Not Improve Outcome After an Open Wedge High Tibial Osteotomy.

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Summary:

Patients with symptomatic varus knees treated with open wedge high tibial osteotomies (OWHTO) and a meniscectomy improved more at short-term follow-up in most of the evaluated functional scores than those patients with concomitant implantation of a medial Actifit® implant. No data was provided to support medial meniscal substitution with a polyurethane scaffold when an OWHTO is being performed.

Abstract:

PURPOSE

To determine whether medial meniscal substitution with a polyurethane scaffold (Actifit®) improves the outcome of medial meniscal deficient varus knees undergoing open wedge high tibial osteotomy.

METHODS

Sixty patients with symptomatic varus knees that underwent open wedge high tibial osteotomies were prospectively studied. In 30 patients, the medial meniscus was left with a defect larger than 25mm (Group M). An Actifit® device was implanted (group A) in the remaining 30 patients. Patients were functionally evaluated with WOMET, IKDC and VAS. Patient satisfaction was graded from 0 (not satisfied) to 4 (very satisfied).

RESULTS

Both groups were comparable preoperatively. They had similar follow-up periods (31.2 months; range, 24-47.5; n.s.). WOMET improved a mean 53.4 ± 8.4 and 42.4 ± 17.2 points in groups M and A respectively ($p=0.002$). IKDC improved a mean 56.7 ± 12 and 50.3 ± 15.6 points in groups M and A respectively (n.s.). VAS dropped 5.9 ± 2.1 and 4.7 ± 2.8 points in groups M and A respectively ($p=0.006$). Patient satisfaction averaged 3.3 ± 0.8 and 3.3 ± 1 in groups M and A, respectively (n.s.).

CONCLUSIONS

Patients with symptomatic varus knees treated with open wedge high tibial osteotomies and a meniscectomy improved more at short-term follow-up in most of the evaluated functional scores than those patients with concomitant implantation of a medial Actifit® implant. However, there was no difference in terms of patient satisfaction with the procedure. Based on the short-term functional results of this study, no data was provided to support medial meniscal substitution with a polyurethane scaffold when an open wedge high tibial osteotomy is being performed.