

Proximal Tibia Medial Biplanar Retrotubercle Open Wedge Osteotomy for Varus Knees with Medial Gonarthrosis

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Objectives: The purpose of this study is to evaluate the early results of proximal tibia medial biplanar retrotubercle open wedge osteotomy for varus gonarthrosis and compare the results with the literature.

Methods: The results of proximal tibia medial biplanar retrotubercle open wedge osteotomy for 23 knees of 22 patients with medial gonarthrosis were evaluated clinically and radiologically.

Results: Twenty of the patients were female and two were male. Mean age of the patients was 56.24; mean body mass index was 31.95 and preoperative HSS (Hospital for Special Surgery) score was 68.7. Mean tibiofemoral axis was 186.39° and mean Insall-Salvati index value was 1.04 preoperatively. Mean follow up period was 30.19 months. Mean HSS score was 86.48, femorotibial anatomic axis angle was 175° and Insall-Salvati index value 1.06 during the last follow-up. The improvement of the HSS score and the femorotibial anatomic axis angle was statistically significant. However, the change in Insall Salvati index values was statistically insignificant. Nonfatal pulmonary embolus in 1 patient, and deep vein thrombosis that occurred one year after the procedure in 1 patient, rhabdomyolysis in 1 patient and loss of correction (relapse) in 1 patient were encountered as complications.

Conclusion: Our results show that proximal tibia medial biplanar retrotubercle open wedge osteotomy improves the frontal and sagittal plane deformities without changing the patellar tendon length. Hence, possible patellofemoral problems are prevented and the clinical results are improved.

The Orthopaedic Journal of Sports Medicine, 2(11)(suppl 3)

DOI: 10.1177/2325967114S00161

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