

Total knee arthroplasty with patella retention in rheumatoid arthritis

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INTRODUCTION:

We compared the clinical results of total knee arthroplasty (TKA) with non-resurfaced patella and resurfaced patella in patients with rheumatoid arthritis (RA).

METHODS:

From 1994 to 2020, 94 cases (68 patients) with RA who underwent total knee arthroplasty were included in this study. The mean age was 61.5 years. The patella was non-resurfaced in 69 cases, whereas resurfaced in 25 cases. The mean follow-up period was 70 months. Clinical evaluation including range of motion (ROM), including Hospital for Special Surgery (HSS) score, Knee Society Knee Score (KS), Function Score (FS), and modified patellar score were evaluated. The complications and anterior knee pain were also evaluated. The radiologic evaluation for patello-femoral tracking using patellar skyline view were evaluated.

RESULTS:

ROM improved from an average of 100 degrees preoperatively to 116 degrees in retention group, improved from an average of 104 degrees preoperatively to 119 degrees in resurface group. HSS score improved from an average of 55 preoperatively to 84 in retention group, improved from an average of 59 preoperatively to 85 in resurface group. KS improved from an average of 50 preoperatively to 90 in retention group, improved from an average of 56 preoperatively to 91 in resurface group. FS improved from an average of 46 preoperatively to 69 in retention group, improved from an average of 51 preoperatively to 70 in resurface group. The modified patellar score improved from an average of 16 preoperatively to 22 in retention group, improved from an average of 15 preoperatively to 23 in resurface group. All values did not have significant differences between two groups. Anterior knee pain was also significantly improved in both groups. Two cases showed patella thinning in retention group.

DISCUSSION AND CONCLUSION:

By retaining the native patella, we were still able to obtain satisfactory results after TKA in patients with RA. We consider that TKA without patellar resurfacing is suitable for rheumatoid arthritis patients with small patella and bony deficiency.