The effect of severity and duration of osteoarthritis on postoperative outcome in total hip arthroplasty

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Purpose

To evaluate the radiographic degree of osteoarthritis (OA) and the duration of symptoms on the postoperative functional outcome and quality of life after a Total Hip Arthroplasty (THA).

Material & Methods

286 patients with primary hip OA were investigated preoperatively and 12-15 months postoperatively with two questionnaires, WOMAC and EQ-5D. The degree of OA was assessed according to the Kellgren-Lawrence (KL) classification system while the preoperative OA symptom duration was divided to < 3 years and > 3 years. A linear regression analysis was used to investigate the influence after adjusting for possible confounders.

Results

222 patients completed the study. 73 patients had KL grade 1-2 and 149 patients KL grade 3-4. There were 92 patients with symptoms < 3 years and 130 patients with symptoms > 3 years. All patients, regardless groups, improved significantly after the operation. Unadjusted analysis showed a relation between symptom duration > 3 years and better outcome. When using regression, both KL classification and symptom duration had not effect on the functional outcome or quality of life.

Conclusion

Preoperative radiographic severity and duration of symptoms did not influence the outcome after THA and therefore should not affect the timing of operative intervention.