

Participation In Sporting Activities Following Knee Replacement: Total Versus Unicompartmental – A 10-Year Follow-Up Study

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INTRODUCTION

Few long-term studies have been published assessing patient sporting activity following knee arthroplasty.

The aim of this study was to investigate participation in sporting activities following knee arthroplasty with minimum 10-year follow-up.

We hypothesized that patients undergoing unicompartmental knee arthroplasty (UKA) would participate in more sport than patients undergoing total knee arthroplasty (TKA).

METHODS

Between January 2004 and September 2006, 141 TKAs and 41 UKAs were performed.

Patients over 75, additional surgeries and bilateral cases were excluded.

Eight TKA patients and two UKA patients are since deceased for reasons unrelated to their surgery.

Four patients underwent conversion of UKA to TKA and were excluded.

Therefore, 76 patients in the TKA group and 31 patients in the UKA group were contacted by questionnaire to assess participation in low impact sports, detailing sessions, how the knee felt during sport and overall satisfaction.

RESULTS

Twelve TKA patients and five UKA patients were lost to follow-up therefore the final analysis consisted of 64 patients (84.2%) in the TKA group and 26 patients (83.9%) in the UKA group.

46 patients in the TKA group (71.9%) versus 21 patients in the UKA group (80.8%) participated in sport. (p=0.193)

UKA patients participated in 2.4 sessions per week compared to 1.5 sessions in TKA patients. (p=0.016).

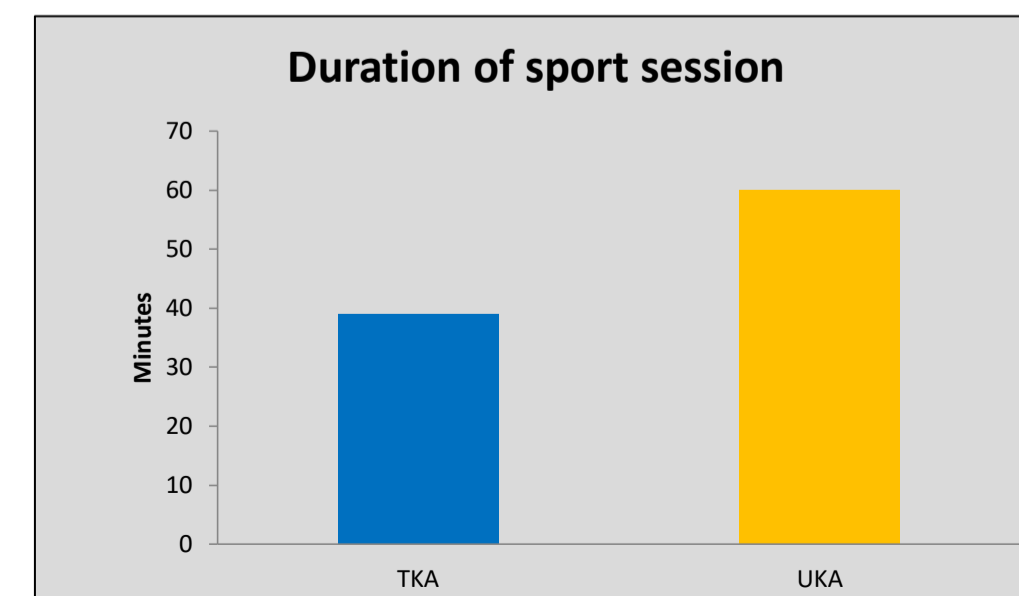
The average session length was 39 minutes in TKA patients and 60 minutes in UKA patients (p=0.069).

32 patients (69.9%) in the TKA group versus 16 patients (76.2%) in the UKA group denied pain during sport.

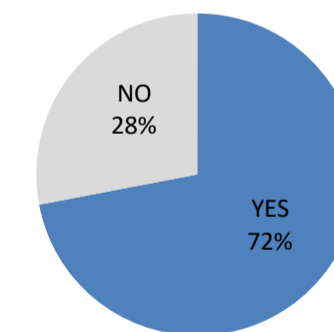
39 patients (84.8%) in the TKA group versus 19 patients (90.5%) in the UKA group felt their knee was stable.

84.3% of TKA patients and 92.3% of UKA patients were “very satisfied” or “satisfied” overall

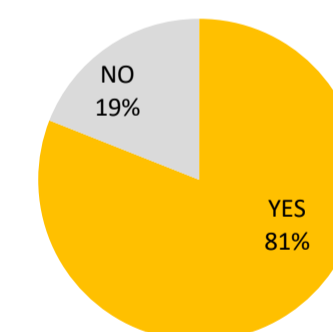
	Total Knee Arthroplasty (TKA)	Unicompartmental knee arthroplasty (UKA)
Sport participation	71.9%	80.8%
Sport sessions/week	1.5 sessions/week	2.4 sessions/week
Session length (minutes)	39 minutes	60 minutes
Pain free during sport	69.9%	76.2%
Reported knee stability	84.8%	90.5%
“Satisfied” or “Very satisfied” overall	84.3%	92.3%



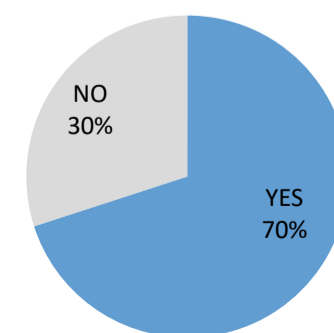
TKA Sport participation



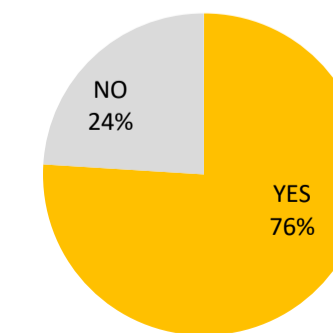
UKA Sport participation



TKA Pain free during sport



UKA Pain free during sport



CONCLUSION

In conclusion, this study demonstrates satisfactory sporting activity 10 years following knee arthroplasty. UKA patients participated in significantly more sporting sessions than TKA patients.

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