Paper #34

Do Runners Return to Running After Total Joint Arthroplasty?

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Introduction: Currently, there are no evidence-based recommendations about returning to running after total joint arthroplasty (TJA). This study examines whether patients who ran prior to TJA were able to return to running.

Methods: This prospective, cross-sectional study of a multi-institutional patient database identified 4,492 primary total hip arthroplasty (THA), total knee arthroplasty (TKA) or partial knee arthroplasty (UKA) patients from June 2015 to June 2020. TJA patients completed an online survey capturing patient demographics, pre-TJA running experience, expectations, surgeon recommendations about return to running, postoperative running, cross-training practices, and satisfaction. Follow-up ranged from 6 months to >10 years.

Results: Of 4,492 TJA patients (57.9% female, 44.4% THA, 51.4% TKA, 4.2% UKA), 549 were runners preoperatively (12.2%: 53.4% THA, 39.7% TKA, 6.9% UKA; 36.3% female, 61.3±11.4 years, 26.9±4.6kg/m2 body mass index (BMI). 59 (10.7%) of pre-TJA runners did weekly muscle strength training. Most (98.3%) ran >2 years before TJA, and 46.5% ran >20 years. 164 (30.5%) expected to return to running, and 374 (69.5%) did not. Surgeon recommendations (528 patients) included no return to running (29.5%), maintain low-impact activities (35.2%), return to their preoperative running level (5.1%), and no recommendations (30.1%). Among 549 TJA preoperative runners, 65 (11.8%, 49 THA, 9 TKA, 7 UKA) returned to running: 64.6% between 2-6 months post-TJA, and 86.2% within 12 months post-TJA. 67.2% were satisfied with their return to running while 32.8% were not; 30.8% reported pain with running. 40 (1.0%) patients (27 THA, 13 TKA) who were not preoperative runners started running post-TJA; 22.2% reported pain with running and 63.9% were satisfied with their weekly amount of postoperative running.

Conclusions: 12% of preoperative runners were able to return to running, and most returned within one year of TJA. Larger-scale studies are needed to guide surgeons to provide standardized or realistic recommendations for patients wishing to resume running after TJA.

Notes