Postoperative Complications following Metacarpophalangeal or Interphalangeal Joint Arthroplasty in Geriatric Patients

Theodore Quan¹, Philip M Parel, Amil Raj Agarwal, Alex Gu², Rachel Ranson³, Sean Tabaie

¹George Washington University, ²George Washington University School of Medicine An, ³NYU Langone Orthopedic Hospital

INTRODUCTION: Geriatric patients are at an increased risk of morbidity and mortality following various orthopaedic procedures, but this has not been explored among metacarpophalangeal (MCP) or interphalangeal (IP) joint arthroplasty patients. Thus, this study analyzed whether geriatric patients undergoing MCP or IP joint arthroplasty are at an increased risk of postoperative complications relative to the younger population.

METHODS: A national database was used to identify all patients who underwent MCP or IP joint arthroplasty from 2006 to 2019 using current procedural terminology codes 26530, 26531, 26535, and 26536. Patients were stratified into an aged 64 or younger group (non-geriatric) and an aged 65 or older group (geriatric). Bivariate and multivariate analyses were performed to compare the demographics data, medical comorbidities, and postoperative complications between the two cohorts.

RESULTS: Of the 1,661 patients who underwent MCP or IP joint arthroplasty, 864 (52.0%) patients were in the aged 64 or younger cohort whereas 797 (48.0%) patients were in the aged 65 or older cohort. On bivariate analyses, geriatric patients were more likely to develop major complications (p=0.020) compared to the non-geriatric cohort. Following adjustment on multivariate analyses, the geriatric cohort no longer had increased likelihood of major complications compared to the non-geriatric group.

DISCUSSION AND CONCLUSION: Geriatric patients are not at an increased risk of complications, readmissions, or mortality following MCP or IP joint arthroplasty compared to their younger counterparts. Age 65 or greater should not be used as an independent factor when evaluating whether a patient is an appropriate candidate for MCP or IP joint arthroplasty.