

# Paper #33

## Patient-Reported Allergies: Does the Number of Allergies Affect Outcomes following Primary Total Hip and Knee Arthroplasty

Jesse Otero, MD, PhD, Christopher Graves, MD, Tyler Olson, BS, Chris Dickinson, BS, Rhonda Chalus, RN, David Vittetoe, MD, Devon Goetz, MD, John Callaghan, MD

**Introduction:** The authors have hypothesized that patients with multiple reported allergies report higher rates of dissatisfaction following TKR and THR based on a retrospective review. The purpose of this study was to prospectively compare patient reported outcomes in patients with and without multiple reported allergies.

**Methods:** The authors prospectively evaluated 500 patients undergoing total hip or total knee arthroplasty at a single institution in 2013 who completed the Short Form-36 (SF-36) and a questionnaire pertaining to their demographics, allergies and comorbidities. The Charlson Comorbidity Index as well as SF-36 Physical Component Score (PCS) and Mental Component Score (MCS) were calculated pre-op and at two year follow up. Differences in outcomes between the patients with and without reported allergies were compared.

**Results:** At minimum two year follow up, age had a significant negative correlation with post op SF-36 PCS ( $r=-0.41$ ,  $p<0.0001$ ). Comorbidity index had a significant negative correlation with post op SF-36 PCS ( $r=-0.3$ ,  $p=0.001$ ) and post op SF-36 MCS ( $r=-0.3$ ,  $p=0.005$ ). Number of patient reported allergies had a significant negative correlation with all outcomes measured ( $p<0.03$ ). Multivariate regression analysis showed that number of patient reported allergies had a significant negative association with pre-op SF-36 PCS, as well as post-op SF-36 PCS, MCS, and WOMAC independent of age and comorbidity index ( $p<0.05$ ).

**Conclusions:** Patients with multiple reported allergies who undergo TJR report less improvement in SF36 physical components scores and WOMAC functional scores following the procedure. It occurred independent of age and patient-reported comorbidities. The patient subgroup with multiple allergies should be counseled as to the potential for less satisfactory outcomes than the patients without multiple allergies. This represents an important process in outcomes studies where authors study a problem retrospectively and then implement a prospective study to corroborate the findings of the retrospective study.

### Notes

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---