Paper #8

Treated vs. Un-Treated Depression in Total Joint Arthroplasty Impacts Outcomes

Notes

Jessica M. Kohring, MD, Jill A. Erickson, PA-C, Mike B. Anderson, MS, Jeremy M. Gililland, MD, Christopher L. Peters, MD, **Christopher E. Pelt, MD**

Introduction: We sought to determine if changes in patient reported mental health scores were associated with physical function improvements following TJA. Additionally, we evaluated if there was a difference between the diagnosis of depression and changes in mental health and physical function PRO scores after TJA, and if patients with depression treated with an anti-depressant had different outcomes when compared to untreated depressed patients.

Methods: We reviewed 202 primary TJA patients from March 2014 to May 2015. PROs included the PROMIS Global 10 Mental Health T score (MH) and the PROMIS Physical Function v1.2 T score (PF CAT). A chart review identified depression and if anti-depressant medications were used. We excluded patients who underwent more than one TJA or were deceased. Multivariable linear regression was used, while controlling for a history of depression, age, sex, BMI, and ASA score. The change in T scores was analyzed using an independent samples T test.

Results: 32% (65/202) were diagnosed with depression. There was a 0.18 T score unit increase (95% CI 0.03-0.33) in the MH score for each one T score unit increase in the PF CAT (p=0.017). Depression patients had a mean change in MH of 4.6 T score units (95% CI, 2.8-6.5) compared to non-depressed patients,' mean change of 7.3 T-score units (95% CI 5.9-8.6, p=0.025). There was no difference in the magnitude of change in PF CAT between depressed and non-depressed patients (p=0.215). Treated patients (83%, 54/65) had a greater increase in PF CAT Score than untreated depressed patients (mean increase of 6.99 (95% CI 5.25-8.73) T-score units compared to 1.47 (95% CI -4.01-6.96), (p=0.015).

Conclusions: Patient reported mental health scores correlate with post-operative physical function outcomes and, in patients with depression, treatment with anti-depressants may be associated with improved outcomes.

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