Paper #7

Psychological Factors Associated with Failure to Complete a Short-Stay Total Hip Arthroplasty Protocol

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Introduction: Patient characteristics are known to correlate with successful completion of short stay total hip arthroplasty (THA) protocols. We investigated the interaction between patient-reported measures of psychological fitness to cope with surgery and successful completion of a short stay THA protocol.

Methods: We performed a prospective cohort study of patients undergoing total hip arthroplasty enrolled in a short stay protocol (defined by expected length of stay (LOS) = 1 day). Patients with in-hospital complications were excluded. Psychological fitness to cope with surgery was measured using the Patient-Reported Outcomes Measurement Information System (PROMIS). PROMIS domains included pain intensity, pain interference, physical function, self-efficacy, depression, anxiety, emotional support, and ability to participate in social roles. Patients were stratified by successful completion of the short stay protocol. PROMIS scores were compared between groups using Student's T-test and logistic regression analysis was performed.

Results: 33 THA cases of 56 enrolled patients have currently completed the study. The rate of successful short stay protocol completion was 84.4%. The mean LOS for the successful group was 1.0±0.0 days and for the unsuccessful group was 2.2±0.5 days. There were no significant differences between groups for demographics or comorbidities. The PROMIS Anxiety score was significantly higher in the group that failed the short stay protocol compared to the group that completed the short stay protocol (58.5±6.5 vs 53.2±4.9, p=0.04). There were no significant differences in the remaining PROMIS domains (p>0.05). Logistic regression found that anxiety was significantly associated with failure to complete the short stay protocol (OR=1.28, 95% CI 1-1.64, p=0.05).

Conclusion: Failure to complete a short stay THA protocol is associated with higher anxiety scores on PROMIS testing. Identification of patients with psychological risk factors for failure to complete a short stay THA protocol may facilitate targeted interventions to help at-risk patients cope with the post-surgical recovery.

Notes