Shoulder Arthroplasty Outcomes in Patients with Major Depressive Disorder or Generalized Anxiety Disorder
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INTRODUCTION: Generalized anxiety disorder (GAD) and major depressive disorder (MDD) represent the two largest groups of mental disorders in the United States and have been implicated as risk factors for adverse events and suboptimal outcomes following surgery. However, studies examining this association in shoulder arthroplasty patients are mixed in their findings. The purpose of this retrospective cohort study was to compare outcomes after shoulder arthroplasty in patients with GAD or MDD to those without a mental disorder diagnosis.

METHODS: A total of 812 patients who underwent primary total shoulder arthroplasty (TSA) or reverse total shoulder arthroplasty (RSA) between 2010 and 2019 were identified by querying the electronic medical record system at our institution. Patients with less than 1-year postoperative follow up or incomplete outcomes data were excluded. Outcomes of interest included shoulder range of motion (ROM), visual analog scale (VAS) pain score, peri and postoperative complications, and hospital and emergency department (ED) readmission rates.

RESULTS: In total, 657 patients were included in the study, 143 of whom had a preoperative diagnosis of MDD and 109 GAD. The control group consisted of 405 patients who did not have preoperative mental disorder diagnosis. Average follow-up was 1.3 ± 0.8 years. Patients with MDD had higher pain scores before surgery compared to the control group (7.3 ± 2.4 vs. 6.7 ± 2.8, p=0.034). At final postoperative follow up, patients with MDD and GAD had significantly higher VAS scores compared to the control group (1.94 ± 2.86 vs. 1.28 ± 2.28, p=0.001 and 2.1 ± 1.64 vs. 1.28 ± 2.28, p=0.022, respectively). Although peri and postoperative complications were similar among the groups, patients with MDD or GAD were significantly more likely to be admitted to the ED or hospital following surgery (p<0.05).

DISCUSSION AND CONCLUSION: Patients with MDD or GAD who underwent shoulder arthroplasty had similar functional outcomes and complication rates, but higher pain scores compared to those without a mental disorder diagnosis. Furthermore, the results of this study suggest that MDD and GAD may be risk factors for ED and hospital readmission following shoulder arthroplasty.