Effects of Psychiatric Comorbidities on the Perioperative Outcomes Following a Primary Total Arthroplasty

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This review was conducted to compare the perioperative outcomes following a total primary arthroplasty among patients with a psychiatric comorbidity versus those without a psychiatric comorbidity. Literature was reviewed from the database Pubmed. Seven cohort and case-control studies were reviewed, with the largest sample size of 8.4 million patients. Psychiatric comorbidities resulted in increased negative perioperative outcomes compared to patients without psychiatric comorbidities in six articles. These studies observed higher rates of revision, blood transfusion, mortality, non-traditional discharge, and increased length and cost of stay for patients with a diagnosed psychiatric condition. Therefore, it was concluded from most studies that patients with psychiatric comorbidities experience more negative perioperative outcomes following a total primary joint arthroplasty than those without. Based on the findings of this review, psychiatric comorbidities should be considered a risk factor when planning a primary arthroplasty. The broader impact of this study is to raise awareness about the impact of psychiatric comorbidities on perioperative outcomes, in an effort to inform practice, quantify the given issue, demonstrate its impact, and suggest ways to move forward in which we can maximize the positive perioperative outcomes of the targeted group.

Community Health; Mental Disorders; Orthopedics; Other Mental and Social Health; Other Psychiatry and Psychology; Psychiatric and Mental Health; Psychiatry; Public Health Education and Promotion; Sports Medicine; Substance Abuse and Addiction; Surgical Procedures, Operative

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Effects of Psychiatric Comorbidities on the Perioperative Outcomes Following a Primary Total Arthroplasty

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Introduction

• Question: Do patients with psychiatric comorbidities experience different perioperative outcomes following total primary joint arthroplasty than those without psychiatric comorbidities?

• A psychiatric comorbidity is the presence of a psychiatric diagnosis at the same time as the presence of another medical issue in the same individual

• The broader impact of the study is to raise awareness about the impact of psychiatric comorbidities on perioperative outcomes, in an effort to inform practice

• The goals are to attempt to quantify the issue, demonstrate its impact, and suggest ways to move forward in an effort to maximize positive perioperative outcomes of the targeted group

• Psychiatric comorbidities include:
  • Depression
  • Dementia (includes Alzheimer’s),
  • Bipolar disorder,
  • Schizophrenia,
  • Alcohol/drug misuse,
  • Anxiety

Methods

• Literature was reviewed from the database Pubmed

• Inclusion/exclusion criteria
  • Include both patients with and without psychiatric disorder
  • Quantitatively measured outcomes
  • Statistical analysis of findings
  • Ethical considerations and consent

• Seven cohort and case-control studies were reviewed, with the largest sample size of 8.4 million patients

Results

• Results of the review suggest a strong correlation between negative perioperative outcomes and psychiatric conditions

• Higher rates of revision, blood transfusion, mortality, non-traditional discharge, and increased length and cost of stay were observed for patients with diagnosed psychiatric conditions

• Patients with psychiatric comorbidities experienced 15% higher rate of perioperative complications (Rasouli et al., 2016)

Public Health Implications and Recommendations

• More than 1.4 million Americans with diagnosed psychiatric disorders have undergone a total primary arthroplasty. 19.1% of total arthroplasty patients have a diagnosed mental illness (Rasouli et al., 2016)

• Psychiatric comorbidities should be considered a risk factor when planning primary arthroplasty

• If a patient with a psychiatric comorbidity is planning to have a total arthroplasty, treatment plans ought to be implemented with their physician

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References


Table 1: Complications in patients with and without alcohol use disorders (Ponce et al., 2015)