

Mental Health Effects on Postoperative Outcomes following Gender-Affirming Vaginoplasty: An Administrative Claims Analysis of Over 1400 Patients

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Introduction

- Mental health diagnoses are common in gender-diverse populations^{1–2}
- Associated with a higher risk of suicidality, substance use, and poor physical health in this patient population^{3–5}
- The impact of mental health on surgical outcomes after gender-affirming surgery remains unclear
- This study examines how preoperative mental health diagnoses affect adverse events following gender-affirming vaginoplasty (GAV)

Methods

Design & Population

- Retrospective cohort study
- Gender-diverse patients undergoing GAV (2010–2022)
- Identified using CPT and ICD-9/10 codes in PearlDiver database (>165M records)

Data Collection

- Preoperative psychiatric diagnoses identified via ICD codes
- Postoperative adverse events identified via ICD/CPT codes

Statistical Analysis

- Chi-square tests & two-sample t-tests
- Compared adverse events between those *with* and *without* preoperative mental health diagnoses

Results



1,449 patients underwent GAV



28.5% had at least one mental health diagnosis

- **Depression: 19.0%**
- **Anxiety: 17.1%**



35.2% had at least one postoperative adverse event

Mental Health Associations*

Disordered pain (9.0%)



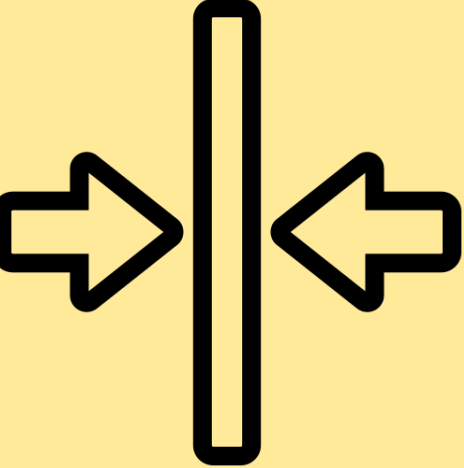
Depressive disorders:
1.58 (1.10-2.27)
Anxiety disorders:
1.58 (1.09-2.30)

Wound complications (7.1%)



Depressive disorders:
1.72 (1.14-2.60)
Anxiety disorders:
1.76 (1.16-2.67)

Vaginal stenosis (10.4%)



Depressive disorders:
1.54 (1.10-2.16)
Bipolar disorders:
2.05 (1.23-3.42)

*Risk ratio (95% confidence interval)

Discussion

- Over 1 in 4 GAV patients had a preoperative mental health diagnosis (most commonly depression and anxiety)
- These patients had higher rates of postoperative adverse events including disordered pain, wound complications, and vaginal stenosis
- Possible mechanisms include mental health effects on pain perception, healing, adherence to postoperative care, and social support following surgery
- Findings highlight the importance of individualized preoperative counseling and coordinated mental health support for those undergoing GAV

References

