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Background

- Limited data exists regarding the prevalence of psychiatric co-morbidities in patient with gender dysphoria (GD) who have undergone genital reconstruction for gender affirmation (GRGA)

Objective

- This study aimed to investigate rates of psychiatric co-morbidities in patients with GD who have undergone GRGA

Methodology

- We conducted a cross-sectional analysis using TriNetX, a healthcare database with >250 million patients
- Using CPT and ICD-10 codes, we identified and compared psychiatric co-morbidity rates in two cohorts:
 - 1) patients with GD without GRGA
 - 2) patients with GD with GRGA. Patients were matched according to age, biological sex, race/ethnicity, and common health co-morbidities.

Table 1. TriNetXTM Demographics

Characteristic	GD with GRGA After Matching N = 4,043	GD without GRGA Before Matching N = 100,540	GD without GRGA After Matching N = 4,043
Male, N (%)	1,687 (41.7)	41,241 (41.2)	1,778 (44.0)
Female, N (%)	2,276 (56.4)	57,133 (57.1)	2,179 (53.9)
Mean age at index (years)	36.1	25.1	37.1
Race/ethnicity, N (%)			
White	3,099 (76.7)	69,695 (69.6)	3,064 (75.8)
Black or African American	227 (5.6)	7,517 (7.5)	245 (6.1)
Hispanic or Latino	246 (6.1)	8,583 (72.5)	246 (6.1)
American Indian	40 (1.0)	893 (0.9)	49 (1.2)
Asian	93 (2.3)	2,251 (2.2)	93 (2.3)
Unknown/Other	765 (18.9)	24,221 (24.1)	762 (18.8)
(%): frequencies			

Genital reconstruction for gender affirmation reduces psychiatric co-morbidities, depression, anxiety, substance abuse, and suicidality, in patients with gender dysphoria



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Results

- We identified 4,061 patients with a history of GD with GRGA and 100,097 patients with a history of GD without GRGA
- At one-year post-surgery and relative to GD without GRGA, the GD with GRGA cohort had significantly lower rates of depression, anxiety, substance abuse, and suicidality
- At five years post-surgery, the GD with GRGA had sustained reduced rates of the psychiatric co-morbidities, as well as PTSD

Table 2. Comparison of prevalence of psychiatric co-morbidities 5 years post GRGA

	Prevalence (%)	Odds Ratio	95% CI	P-value
Depression				
GD with GRGA	997 (24.7)	0.761	(0.690, 0.839)	< 0.0001
GD without GRGA	1,216 (30.1)			
Anxiety				
GD with GRGA	1,089 (26.9)	0.701	(0.638, 0.771)	< 0.0001
GD without GRGA	1,393 (34.5)			
PTSD				
GD with GRGA	278 (6.9)	0.831	(0.704, 0.981)	0.028
GD without GRGA	330 (8.2)			
Substance Abuse				
GD with GRGA	484 (12.0)	0.633	(0.559, 0.717)	< 0.0001
GD without GRGA	715 (17.7)			
Suicidality				
GD with GRGA	127 (3.1)	0.530	(0.425, 0.661)	< 0.0001
GD without GRGA	233 (5.8)			

Conclusion

- Our study illustrates that patients with GD who have undergone GRGA have reduced psychiatric co-morbidities
- These findings provide valuable insights for providers and policy makers, enabling them to develop targeted interventions and support systems to enhance the mental health outcomes of individuals with GD