

Perioperative SSRI and SNRI Use is Safe in Patients Undergoing Facial Feminization Surgery



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INTRODUCTION

- Transgender individuals have higher rates of mood disorders than cisgender individuals, and are frequently prescribed selective serotonin reuptake inhibitors (SSRI) or serotonin norepinephrine reuptake inhibitors (SNRI)
- SSRIs/SNRIs impair platelet aggregation, increasing perioperative bleeding risk.
- Facial feminization surgery (FFS) is a series of gender-affirming procedures to restructure male facial features into a more feminine appearance, to align with one’s gender identity.
- Hematoma is a common complication of FFS, and the impact of SSRI/SNRI use on this risk remains unclear.

PURPOSE

To evaluate whether perioperative SSRI or SNRI use increases hematoma or overall complication risk following FFS.

METHODS

- Retrospective review of patients undergoing FFS by the senior author at our institution (2017-2024).
- Demographics, comorbidities, perioperative SSRI/SNRI use, and postoperative complications (hematoma, surgical site infection, dehiscence, unplanned reoperation, readmission) were captured.
- Patients on non-serotonergic antidepressants were excluded.
- Chi-square test of independence or Fisher’s exact test used for statistical comparisons.
- Multivariable regression assessed complication risk with SSRI/SNRI use, controlling for age, ethnicity, body mass index (BMI), smoking, and diabetes.

RESULTS

- 344 FFS patients included and 13.7% reported SSRIs/SNRIs use for depression or anxiety.
- SSRI/SNRI users
 - 72.3% were on SSRIs, and 23.4% were on SNRIs.
 - More commonly White (70.5% vs. 35.4%, p < 0.001)
 - No other significant demographic or comorbidity differences between SSRI/SNRI users and non-users
- No significant differences in postoperative complications between SSRI/SNRI users and non-users (**Table 1**).
- On multivariable regression SSRI/SNRI use was not an independent risk factor of any postoperative complication including hematoma (**Table 2**).
- Outcome-specific analysis similarly showed no increased risk of surgical site infection, dehiscence, unplanned reoperation, or readmission with SSRI/SNRI use (all p > 0.05).

TABLE 1. POSTOPERATIVE COMPLICATIONS BY SSRI/SNRI USE				
	Overall N = 344	No SSRI/SNRI Use N = 297	SSRI/SNRI use N = 47	p
Postoperative complication	26 (7.6)	23 (7.7)	3 (6.4)	>0.999
Hematoma	12 (3.5)	10 (3.4)	2 (4.3)	0.667
Surgical site infection	14 (4.1)	13 (4.4)	1 (2.2)	0.703
Dehiscence	3 (0.9)	3 (1.0)	0 (0.0)	>0.999
Unplanned reoperation	8 (2.4)	6 (2.1)	2 (4.3)	0.309
Readmission	9 (2.7)	8 (2.7)	1 (2.1)	>0.999
Data reported as n (%) SSRI, selective serotonin reuptake inhibitors; SNRI, serotonin norepinephrine reuptake inhibitors				

TABLE 2. MULTIVARIABLE REGRESSION						
	Postoperative complication			Hematoma		
	OR	95% CI	p	OR	95% CI	p
SSRI/SNRI use	0.81	0.18, 2.55	0.8	1.11	0.16, 4.56	0.9
Age (Years)	1.0	0.95, 1.00	0.8	0.99	0.91, 1.01	0.7
BMI (kg/m²)	1.05	0.98, 1.12	0.13	0.99	0.89, 1.08	0.8
Ethnicity - Hispanic	0.72	0.27, 1.74	0.5	1.03	0.27, 3.40	>0.9
History of tobacco use						
Never	–	–	–	–	–	–
Current	0.24	0.04, 0.90	0.065	0.30	0.02, 1.77	0.3
Former	1.36	0.52, 3.36	0.5	1.40	0.35, 4.90	0.6
Diabetes	1.31	0.07, 8.89	0.8	0.00		>0.9

OR, odds ratio; CI, confidence interval
SSRI, selective serotonin reuptake inhibitors; SNRI, serotonin norepinephrine reuptake inhibitors; BMI, body mass index

CONCLUSIONS

- Although SSRI/SNRI use has been linked to bleeding risk in other surgical settings, no association with postoperative complications was observed, including hematoma.
- These findings support the perioperative safety of continuing these medication sin patients undergoing FFS

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