Anxiety and Depression as Predictors of Emergency Department Visits Post Bariatric Surgery

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Introduction

The purpose of this study is to investigate emergency department (ED) visits after bariatric surgery among patients with a history of anxiety and/or depression. We predict that patients with a reported history of anxiety and/or depression will have more ED visits in the year following surgery than patients without a history of mental illness. A secondary goal is to investigate if there is a difference in readmission rates among patients who received a Roux-en-Y gastric bypass (RYGB) as compared with patients who underwent sleeve gastrectomy.

Methods and Procedures

- Data points were retrospectively collected from the charts of 1,133 patients who underwent sleeve gastrectomy or gastric bypass surgery between March 2012 and December 2019.
- 545 patients reported no anxiety or depression, 148 patients had only anxiety, 177 patients had only depression, and 429 patients had anxiety and depression.
- Variables, including patient demographics, mental health, history, baseline BMI, and emergency department visits were reviewed over the first year following surgery.

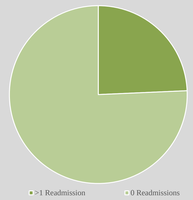
References

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Results

- Patients with a history of depression were not found to have an increase in ED visits when compared to patients without depression (p = 0.076).
- Patients with a history of anxiety were not found to have higher ED visits when compared to patients without anxiety (p = 0.234).
- Patients with a history of both anxiety and depression were not found to have an increase in ED visits in the first year following bariatric surgery (p = 0.383).
- Of the 646 patients who received RYGB, 157 patients had at least one hospital readmission in the year following surgery with a total of 230 readmission. 70 of the 402 patients who received a sleeve gastrectomy had at least one hospital readmission in the year following surgery with a total of 93 readmission (OR = 0.205, p = 0.027, CI [0.05 – 0.83]).

Proportion of patients with RYGB with at least 1 postoperative readmission



Proportion of patients with sleeve gastrectomy with at least 1 postoperative readmission

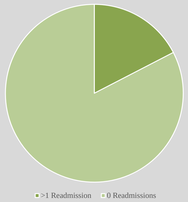


Table 1. ED visits 1 year after surgery among patients with and without a history of anxiety (p = 0.234)

	Median ED Visits	Minimum ED Visits	Maximum ED Visits
Anxiety	0	0	13
No anxiety	0	0	10

Table 2. ED visits 1 year after surgery among patients with and without a history of depression (p = 0.076)

	Median ED Visits	Minimum ED Visits	Maximum ED Visits
Depression	0	0	13
No depression	0	0	7

Table 3. ED visits 1 year after surgery among patients with anxiety and depression and patients without anxiety or depression (p = 0.383).

	Median ED Visits	Minimum ED Visits	Maximum ED Visits
Anxiety and depression	0	0	13
No anxiety or depression	0	0	10

Discussion

- Literature suggests there may be lower referral rates to bariatric surgery among patients with mental health due to fears of poor outcomes and decreased rates of weight loss (1). However, out study results indicate that with a robust preoperative psychological program like the one implemented at our institution, patients with mental illness have no higher complication rates than patients without diagnosed depression or anxiety.
- Patients who were treated with a sleeve gastrectomy were readmitted due to postoperative complication less frequently than those who were treated with a gastric bypass which supports current literature (2).

Conclusion

- Patients with a history of anxiety, depression or both did not have an increased rate of emergency department visits within the first year following surgery.
- Patients may have less access to bariatric surgery, possibly due to fears of increased complication rates. Our study found that surgery is still beneficial in this population.
- This finding contradicts current literature that has shown an increased ED visit rate following bariatric surgery among patients diagnosed with bipolar or schizophrenia.
- Patient who underwent a RYGB had higher rates of readmission postoperatively as compared with patients who underwent sleeve gastrectomy.