

Background

- Anorexia Nervosa is a debilitating illness with a lifetime prevalence in women of up to 4% with an average duration of 6 years. Mortality rates are as high as 5%. Most deaths are due to suicide or physiological complications affecting all systems.
- ➤ It is often a lifelong disease with 20% of individuals experiencing residual symptoms and another 20% exhibiting unremitting symptoms despite treatment with psychotherapy or medications.
- > Anorexia is characterized by:
 - Severe restriction in energy intake relative to requirements
 - Persistent behavior that interferes with weight gain or fear of gaining weight
 - Disturbance in the way one views or experiences their body weight or figure
- > There are two subtypes
 - Restricting type: weight loss achieved through dieting, fasting, and/or excessive exercise
 - Binge-purge type: Individual engages in recurrent episodes of binge eating or purging behaviors
- Severity is determined by BMI
- ❖ Mild BMI >17
- ❖ Moderate BMI of 16-16.99
- ❖ Severe BMI of 15-15.99
- ❖ Extreme BMI <15</p>
- ➤ Notably, there are no FDA approved medications for anorexia.
- Psychiatric medication such as stimulants, SSRIs, and atypical antipsychotics are frequently prescribed in conjunction with psychotherapy. [1]
- In bariatric surgery candidates, eating disorders and other psychopathology such as depression and anxiety should be screened for as they are particularly prevalent in this population and may portend poor postsurgical outcomes. [2]
- In this case we seek to present a patient that was complex from a medical decision-making perspective secondary to her deteriorating medical condition and decreased capacity stemming from her restrictive eating disorder that required the consulting psychiatry team to closely coordinate with multiple services.

Anorexia Caused By Gastric Bypass?

Phillip Shwae, MD; Alexander Lopez, MD; Ajita Mathur, MD Department of Psychiatry, Einstein Healthcare Network, Philadelphia, PA

Case Presentation

Initial presentation:

- ➤ 46-year-old cachectic appearing woman admitted from her nursing home due to failure to thrive with refusal to eat and participate in wound care. She has been admitted before with similar concerns regarding reduced p.o. intake, claiming she is not being given enough to eat or her food is being taken away from her.
- Past Medical History
 - Gastric Bypass 17 years ago secondary to obesity
 - Opiate use disorder on MAT
 - Hypertension
- Past Psychiatric History
 - Depression and Anxiety
 - On Lexapro 15 mg daily
 - ❖ 1 acute inpatient psychiatric hospitalization for suicide (~5 years ago via OD on Remeron)
 - No prior documentation of an eating disorder
- On Exam
 - ❖ Persistent claims that there was something wrong with her food (amount, size, type, etc.) or not being given the time to eat her food despite being surrounded by various types of food
 - Would often play with her food or move it around without eating it
 - Specific denials of depression with no observed overt symptoms of psychosis
 - * Resistant to interventions or medication changes from the medical teams and nursing
 - Unwilling to engage in a discussion regarding her food restriction or the fact that she was malnourished either via deflection, becoming hostile, or outright refusal to speak
 - Refused weighing. Last documented weight of 65kg; incongruent with appearance
 - Family states that patient began restricting after her bariatric surgery
 - Deemed to lack capacity for medical decision by the consult team regarding management of care regarding her hypoglycemia

Course of Treatment:

- Initially treated for:
 - Chronic PE's, Multiple deep tissue injuries necessitating surgical debridement, UTI growing multiple species of bacteria necessitating IV antibiotics
- Clinically continued to worsen as patient refused care as well as p.o. intake and eventually was resistant to receiving D5 fluids, resulting in severe hypoglycemia causing her to code
- Psychiatry was consulted for possibility of ECT by the primary team
 - ❖ Determined the patient was most likely suffering from a restrictive eating d/o vs depression
 - ECT would not be indicated at this time
 - ❖ Recommended continuing antidepressants and use of medications for appetite stimulation
- > Primary team, Palliative, and Psychiatry were involved with several conversations with family
 - Determined that feeding tube placement would not be pursued
 - o Patient stated that she did not want feeding tube and would be physically resistant to it
 - Placement of tube would unlikely improve clinical outcome
 - ❖ Family initially wanted the patient to be full code, but as the patient's condition continued to worsen and she developed renal failure requiring dialysis, the family decided to change her status to DNR/DNI and transition to hospice care
- > Patient continued to experience persistent metabolic derangements, thrombocytopenia, decreased albumin, and significant edema secondary to fluid retention from renal failure; all in the context of ongoing infection and severe deconditioning
- > Patient ultimately required ICU level of care and became non-responsive towards the end
- ➤ The patient eventually became hemodynamically unstable and passed in the hospital before transition to hospice could be made, approximately 1 month after admission

Lab Work

Metabolic Screen	Admission	Final
Sodium	135 L	138
Potassium	3.3 L	3.9
Chloride	112 H	85 L
CO2	15 L	20 L
BUN	5 L	28 H
Creatinine	0.41 L	2.21 H
Calcium: normal (ionized)	5.5 L	5.9 L (1.04 L)
Magnesium	1 L	2.7 H
Phosphorous	2.8	4.3
Alk Phos	103	264 H
Albumin	1 L	0.7 L
Total Protein	3.5 L	1.8 L

Discussion/Conclusions

- Development of anorexia after gastric bypass seems relatively rare as literature review via PubMed resulted in a limited number of case reports. However, our patient's history was positive for elements one might expect from such a patient.
- At time of consultation, she was given the diagnosis of eating disorder unspecified. We now better characterize it as Restrictive Anorexia Nervosa. Interestingly, her documented weight would not have qualified her for the diagnosis under DSM IV which required < 85% ideal body weight. [3]
- Several studies show that patients undergoing bariatric surgery have a high prevalence of psychiatric comorbidity, (40% in one study), and that they may be prone to eating disorders and distorted sense of body image/weight. Additionally, it's indicated in a 10 year follow up study that they are at an increased risk for suicide. [2] All aspects seen in our patient.
- Furthermore, despite the patient not having a formalized diagnosis of an eating disorder prior to bariatric surgery, it has been suggested that obesity is on the opposite end of the eating disorder spectrum from anorexia, and that surgery itself might be the instigating factor that triggers the flip. [4]
- From a consult perspective, patients can still have capacity for medical decision making for care as it relates to other aspects outside of their anorexia. [5] However, this becomes more complicated as the disease progresses and begins to touch those areas as well. Overall, research should continue regarding post-operative psychiatric follow-up and intervention for bariatric surgery patients.

References

- 1. Cass, K., McGuire, C., Bjork, I., Sobotka, N., Walsh, K., & Mehler, P. S. (2020). Medical Complications of Anorexia Nervosa. *Psychosomatics*, *61*(6), 625–631. https://doi.org/10.1016/j.psym.2020.06.020
- 2. Yen, Y. C., Huang, C. K., & Tai, C. M. (2014). Psychiatric aspects of bariatric surgery. *Current opinion in psychiatry*, *27*(5), 374–379. https://doi.org/10.1097/YCO.00000000000000
- 3. American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders: DSM-IV-TR. Washington, DC: Author
- 4. Deitel M. (2002). Anorexia nervosa following bariatric surgery. *Obesity* surgery, 12(6), 729–730. https://doi.org/10.1381/096089202320995475
- 5. Lopez, A., Yager, J., & Feinstein, R. E. (2010). Medical futility and psychiatry: palliative care and hospice care as a last resort in the treatment of refractory anorexia nervosa. *The International journal of eating disorders*, *43*(4), 372–377. https://doi.org/10.1002/eat.20701