

## BACKGROUND

Suicide is a frequent cause of mortality among patients with eating disorders, particularly among those with anorexia nervosa (AN). When patients refuse oral nutrition, nasogastric tube (NGT) feeds are an effective treatment for weight restoration in eating disorders such as AN. However, NGTs can be manipulated by patients and therefore present several safety concerns, the most serious of which is that they pose a ligature risk. We present a case of multiple suicide attempts via NGT in a patient with an eating disorder and chronic suicidality. This case report aims to raise awareness about a lethal risk of a common eating disorder treatment, which though inherent to the treatment itself, is rarely cited in the literature and for which no current guidelines exist.

## CASE REPORT

HS is a 17-year-old Orthodox Jewish female, who identifies as part of the LGBTQ community, with a 2-year history of an NGT-dependent eating disorder, multiple past medical hospitalizations, one past psychiatric hospitalization, multiple prior suicide attempts, as well as a history of trauma, MDD, anxiety, and NSSIB by scratching, who presented to the Children's Hospital at Montefiore (CHAM) emergency department after becoming emotionally dysregulated during an outpatient therapy session and subsequently running into the street to attempt suicide. While in the emergency department, HS attempted suicide via strangulation with her NGT. Because of her NGT-dependence, she was rejected by all adolescent psychiatric units, and because of her suicidality, she was rejected by eating disorder units. Therefore, she was admitted to a pediatric medical unit where she received ongoing psychiatric care through the consult-liaison psychiatry service. Despite constant 1:1 observation, HS had 3 suicide attempts via NGT strangulation during her hospital course. The Office of Mental Health approved a transfer to the hospital's adult psychiatric unit, however while admitted there, the patient refused all NGT feeds in an effort to starve herself to death. HS was therefore transferred back to the pediatric medicine unit.

A multidisciplinary team including psychiatry, psychology, social work, adolescent medicine, pediatric medicine, nursing, child life and behavioral health techs worked to integrate behavioral treatments into HS's care. Since the institution of a comprehensive behavioral care plan and the initiation of a medication regimen consisting of lithium, aripiprazole, duloxetine, and oral contraceptives (for PMDD), HS made significant progress. She began accepting foods orally and no longer required supplemental nutrition via NGT. She also no longer endorsed SI, reported fewer symptoms of PTSD, and was overall less behaviorally dysregulated, with no further suicide attempts via NGT strangulation. Once stable, the patient was accepted and transferred to a psychiatric residential treatment program.

## DISCUSSION

This case is notable not only for the multiple suicide attempts via NGT strangulation but also for the accompanying refusal of nutritional intake. While existing literature has documented cases of patients with eating disorders manipulating their NGTs to avoid weight gain by aspirating gastric contents (McClenahan, 1993) or refusing feeds, thereby risking death via starvation, only one other case report describes a suicide attempt via NGT strangulation in a patient with an eating disorder (Surgenor, 1998).

## DISCUSSION (CONT.)

People with eating disorders exhibit higher rates of suicide compared to the general population, with one meta-analysis indicating that up to 27% of deaths in AN were attributed to suicide (Sullivan, 1995). Although NGTs are an essential nutritional intervention in eating disorders, their inherent ligature risk remains a blind spot in treatment protocols, particularly concerning individuals with comorbid suicidality, as evidenced by the lack of safety guidelines.

In this case and others, it is crucial to delve into the intricate interplay of psychological, social, and cultural factors shaping the patient's experiences and treatment journey. Examining how factors such as being an Orthodox Jewish LGBTQ individual intersect with the illness and impact treatment outcomes could provide valuable insights. Exploring the challenges faced by both the patient and the healthcare team in navigating treatment resistance, limited placement options, and managing multiple primary psychiatric concerns alongside an NGT-dependent eating disorder offers valuable context for understanding the complexities of this case. Additionally, considering the impact of trauma history on treatment dynamics can provide insights into tailoring interventions effectively.

This case also prompts a discussion of future research areas. Exploring alternative feeding methods, developing specialized treatment protocols, or studying certain psychopharmacologic interventions (such as lithium) could enhance our ability to manage similar complex cases in clinical practice. Addressing these nuanced aspects of this case can advance our understanding and approach to managing the complex intersection of eating disorders, suicidality, and NGT use effectively.

## CONCLUSIONS

This case underscores the need for the development of comprehensive safety guidelines regarding NGT use in individuals with eating disorders and comorbid suicidality. The repeated suicide attempts despite rigorous supervision highlight the critical gap in current practices and emphasize the necessity of tailored protocols to mitigate the inherent ligature risk associated with NGTs. Moreover, this case sheds light on the daunting challenge of finding appropriate psychiatric placements for individuals with complex presentations, including NGT-dependent eating disorders coupled with primary psychiatric concerns such as PTSD, MDD, and suicidality. Addressing these challenges requires a multidisciplinary approach, integrating behavioral treatments, pharmacotherapy, and specialized care to optimize outcomes for patients like HS. Moving forward, concerted efforts are needed to establish evidence-based guidelines and protocols for treating patients with comorbid NGT-dependent eating disorders and suicidality.

## DISCLOSURES

The presenting authors have no relevant financial or non-financial relationships to disclose.

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