

Case Report: Psychiatry's Triple A – Anorexia, Anxiety, and Anankastia

Marta Markiewicz, 5th Year Medical Student. Nick Mullin, Honorary Senior Lecturer

INTRODUCTION

This case report concerns AB, a 21-year-old female who has kindly offered to share her experience of anorexia nervosa, and her journey through her eating disorder, recovery and beyond. This case report will discuss specific time points in her life, culminating in mental health illness.

CASE PRESENTATION

Childhood

AB's family unit growing up included her mother, father, and an older sister. As early as 4-years-old she exhibited signs of social anxiety. For example, she required extra support to integrate into a nursery and school environment due to anxieties around interacting with others. Alongside this, she recalls having overvalued ideas of experiencing embarrassment. If it was icy outside, she refused to leave the house in fear of falling over and having people laugh at her.

Family

There is a history of mental health variation in her family. Her aunt is diagnosed with obsessive compulsive disorder. Her sister experiences self-image issues and social anxiety, which AB witnessed growing up. Her mother exhibits anankastic traits in the form of perfectionism, especially in relation to cleaning.

Adolescence

As an adolescent, she was in the upper centiles for height and weight, and practised sports which were not traditionally feminine. This culminated in a feeling of being 'different' and heightened her social anxiety.

Upon starting secondary school, AB became aware of the 'popularity' dynamic and noticed that all 'popular' girls were thin. She yearned to fit in and made her 'new year's resolution' to lose weight. She commenced a weight loss regimen including an intake of 1200 calories a day and high-intensity interval training (HIIT). Alongside this routine, she also excelled academically.

At 14, her mother first initiated a visit to the GP. AB was told that although her behaviours were abnormal, her body mass index (BMI) was not low enough to qualify for a diagnosis of anorexia nervosa and so she was not offered any help. Now, AB did not want to only lose weight, she wanted to be underweight.

At this point AB was experiencing amenorrhea, inability to regulate body temperature, and damage to her back from repeated abdominal exercises. She had obsessions surrounding weight loss and would compulsively exercise, restrict her food intake below 900kcal/day and conceal this behaviour from the rest of the family. She reports self-harm and suicidal ideation at the time.

Diagnosis and Treatment

Later that year she was formally diagnosed with anorexia nervosa and managed as an outpatient. She had cognitive behavioural therapy (CBT) as well as family therapy, and a meal plan made by a nutritionist. AB did not want to engage

with CBT, as she did not agree that her anorexia was a problem, and the family therapy only increased the family's preoccupation with food. She continued to lose weight (down to a BMI of 14.7). Due to this she was admitted to an inpatient child and adolescent mental health ward, and then following further weight loss, her care was escalated to a unit with nasogastric tube (NGT) insertion capabilities.

She was placed under Section 3 of the Mental Health Act for the purposes of treatment, as she refused to eat. On admission to the specialist unit, her BMI was 13.2, she weighed 36kg. Her medication included melatonin 2mg once nightly and thiamine 100mg daily.

AB had grown to see anorexia as part of herself, she was obsessed with being able to see her bones protrude through her skin. The severity of thinness that she was trying to achieve escalated with the length of her eating disorder. Her suicidal ideation also continued, with AB hoping she would get refeeding syndrome which could potentially kill her.

Once an NGT was placed, she learned the shift patterns of workers that could place NGTs and tried to omit removing the NGT during these times. However, with time she regained some weight and started thinking about recovery. She did not enjoy having feeding tubes and other methods which took her control away.

At this time her sister's boyfriend was a vegan for lifestyle reasons, and this appealed to AB. She approached her treatment team and requested for them to allow her to follow a vegan diet. As vegan diets are highly restrictive by virtue of cutting out many food groups, they were hesitant but eventually trusted her to try a vegan diet.

Immediately AB began eating again, going from tube feeding to solid food overnight. She centred veganism in her personality, as opposed to her anorexia. Her psychiatrist took more risks and recommended she start exercising. With the help of a physical instructor, she built muscle and found she really enjoyed it. These changes inspired her to view her body differently - AB now wanted a strong body, instead of a thin one. At 44.4kg she was discharged.

A year after discharge she asked to stop being weighed, as she was 'tired of her life revolving around food'. AB took her recovery into her own hands - she admitted she prefers to have control as she does not trust others to do a 'good job' with tasks concerning her. Currently she continues to exercise via weightlifting, uses protein counting and weight monitoring as a way to track her progress at the gym, all the while studying towards a degree at university.

DISCUSSION

Definitions

Apart from being a catchy title, 'Psychiatry's Triple A' of Anorexia, Anxiety and Anankastia swiftly captures the interrelatedness of these presentations, and how often they can occur alongside each other.

Anorexia nervosa (AN) is an eating disorder characterised by a significantly low body weight (<18.5 BMI in adults, and BMI-for-age under 5th centile in adolescents), restricted eating, purging behaviours, and a fear of gaining weight.¹ It is a multidetermined disorder, with a variety of contributory

factors including genetics, psychological and environmental factors.

Anxiety disorder is characterised by excessive fear and behaviours to abate anxiety states. Social anxiety disorder is specifically related to fear around social situations, and fears of having one's actions be negatively assessed by others.¹

Personality disorder diagnosis has undergone a recent paradigm shift with the advent of the International Classification of Disease coding (ICD-11), moving from strict categories into a dimensional model. The classification has condensed the previously complex categories into one unifying term: personality disorder, which can then be specified into 'mild', 'moderate' or 'severe'. The personality disorder is then described in terms of the traits the patient exhibits. The focus of this case report being anankastic traits, which include perfectionism, behavioural and emotional constraint, and a rigid and inflexible world view.¹ The anankastic traits resemble the previously described 'obsessive compulsive personality disorder' of previous editions of the ICD coding.

Interplay of the three disorders

The prevalence of psychiatric and personality disorder comorbidities with AN is well-documented in the literature.^{2,3} Psychiatric comorbidities have an impact on the presentation, treatment acceptability, and recovery from AN – making it essential to understand the complexity of a patient's presentation to increase chances of successful treatment. Over half (62%) of patients with AN have a simultaneous diagnosis of anxiety, and the anxiety disorder often predates the eating disorder.² The rate of personality disorders is also higher in people with eating disorders than the general population. In particular, the association between eating disorders and personality disorders seems to rely on common traits - perfectionism and rigidity are traits of anankastia as well as AN, whereas impulsivity is a borderline trait which is seen in bulimia nervosa.²

AB's social anxiety predated her AN, and upon exploration of how the two interacted, we discussed how she yearned to be as small as possible as this would make her less noticeable and more innocuous in social situations. While AB does not fulfil the criteria for a personality disorder, she has clearly demonstrable traits of anankastia – perfectionism, reluctance to delegate tasks, rigidity, overvaluation of certain ideas. It is possible that these traits played a role in the maintenance and intensification of anorexic desires via positive reinforcement of weight loss as a means of control, and negative reinforcement in the overvalued fear of weight gain as a sign of personal failure. Once established, the eating disorder behaviour perpetuates itself through reinforcement, which would be in accordance with the functional analysis model of AN.⁴

Treatment

The medical treatment of anorexia nervosa includes weight restoration and prevention of refeeding syndrome, as detailed in the recently updated guidelines published by the Royal College of Psychiatrists.⁵ Once refeeding is complete, patients with AN are at a high risk of relapse – studies show that up to 50% relapse in the first year after successful inpatient treatment.⁶ Thus, following weight restoration it is important to improve eating habits and the cognitive patterns that led to AN in the first place to prevent relapse.

Kathleen Pike, a renowned psychologist summarises that "one of the critical tasks at all points in treatment is to identify

the function of the eating disorder symptoms and assist patients in developing alternative strategies for achieving identified life goals".⁶ If the function of a highly restrictive eating disorder is to fulfil emotional needs such as the relief of anxiety, or to provide an area of life a person can have total control over, then without a replacement weight restoration is in most cases temporary.

One could argue that replacing one 'vice' with another is counterproductive. In our case report, AB replaced anorexia nervosa with a (some would argue almost equally as restrictive) vegan diet and a gym habit. Isn't that just kicking the can down the road, and not tackling the underlying issue? Perhaps, but the changes in metabolic state from starved to fed between acute and recovered anorexics has been associated with an improvement in value-based decision making and risk aversion,⁷ essentially meaning that it is possible that once eating regularly, patients with AN might become more receptive to therapy due to risk of long-term AN. One would hope that through this they would gain resilience allowing them to not rely on maladaptive strategies like restriction when times of stress arise.

When asked if she wanted to highlight anything to the medical community, AB said "Don't see anorexia as a physical disease, see it as a mental disorder", especially in relation to how much conversations with some staff revolved around food and her eating disorder. "Talk to them like a friend" she added – and this reflects attitudes of other patients and their families who felt as though treatment was focused on the low weight of the patient, as opposed to their psychological health underpinning their ED.⁸

In conclusion, building a therapeutic relationship with a patient, appreciating their strengths, and working to empower them in a way that is acceptable to them are invaluable tools when treating patients with anorexia nervosa.

Correspondence to:

martamarkiewicz@doctors.org.uk

REFERENCES

1. World Health Organization. ICD-11: International statistical classification of diseases and related health problems. Geneva: World Health Organization; 2019.
2. Hambleton A, Pepin G, Le A, et al. Psychiatric and medical comorbidities of eating disorders: findings from a rapid review of the literature. *J Eat Disord.* 2022;10(1). Available from: <https://doi.org/10.1186/s40337-022-00654-2>
3. Braun DL, Sunday SR, Halmi KA. Psychiatric comorbidity in patients with eating disorders. *Psychol Med.* 1994;24(4): 859–867. Available from: <https://doi.org/10.1017/s0033291700028956>
4. Slade P. Towards a functional analysis of anorexia nervosa and bulimia nervosa. *Br J Clin Psychol.* 1982;21(3):167–79. Available from: <https://doi.org/10.1111/j.2044-8260.1982.tb00549.x>
5. Royal College of Psychiatrists. Guidance on recognising and managing medical emergencies in eating disorders. Royal College of Psychiatrists. 2022.
6. Pike KM. Long-term course of anorexia nervosa: response, relapse, remission, and recovery. *Clin Psychol Rev.* 1998;18(4):447–75. Available from: [https://doi.org/10.1016/s0272-7358\(98\)00014-2](https://doi.org/10.1016/s0272-7358(98)00014-2)
7. Bernardoni F, Bernhardt N, Pooseh S, et al. Metabolic state and value-based decision-making in acute and recovered female patients with anorexia nervosa. *J Psychiatry Neurosci.* 2020;45(4):253–61. Available from: <https://doi.org/10.1503/jpn.190031>
8. Gustafsson SA, Stenström K, Olofsson H, Petterson A, Wilbe Ramsay K. Experiences of eating disorders from the perspectives of patients, family members and Health Care Professionals: A Meta-review of qualitative evidence syntheses. *J Eat Disord.* 2021;9(1). Available from: <https://doi.org/10.1186/s40337-021-00507-4>