

Facing an eating disorder: A case of body dysmorphic disorder and avoidant/restrictive food intake disorder

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Abstract

Eating disorders can be notoriously difficult to diagnose and treat. This patient is an 18-year-old female who presents to care severely underweight and notably cachexic. For a number of years, she had experienced depressive symptoms, anxiety, and continued loss of appetite. She denied purposefully restricting foods, recognized that she was thin, and denied a fear of gaining weight. She was admitted to a disordered eating unit for refeeding and during her inpatient stay disclosed that she had a long-standing “hatred of face.” Ultimately, she received the diagnoses of avoidant/restrictive food intake disorder and body dysmorphic disorder. This case highlights the importance of differentiating body dysmorphia, seen in body dysmorphic disorder, and distorted body image, as seen in anorexia nervosa. This differentiation is significant as the treatment approaches to these distinct diagnoses are not the same.

Keywords

Body dysmorphic disorder, avoidant/restrictive food intake disorder, body dysmorphia, distorted body image, eating disorder, anorexia nervosa

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Introduction

In the clinical setting, diagnoses are determined using clinical criteria from the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5) (Table 1). Distorted body image associated with anorexia nervosa (AN) is defined as “disturbance in the way in which one’s body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.”¹ In the context of malnutrition, it is critical to determine whether a patient is experiencing body image concerns. Avoidant/Restrictive Food Intake Disorder (ARFID), which may also be associated with significant weight loss, is specifically not associated with a disturbance in the way the patient experiences weight or body shape. For those suffering with body dysmorphic disorder (BDD), the preoccupation with appearance is with perceived defects in physical appearance not observable to others; these concerns are not better explained by concerns with body fat or weight that would be required for a diagnosis of AN.¹ It is critical to distinguish the quality of the preoccupations with appearance in the context of overlapping sets of symptoms in order to correctly diagnose and provide appropriate treatment to the presenting patient. This

case represents an example of the need to correctly identify the patient’s perseverative thoughts regarding appearance in order to provide life-saving medical and mental health care.

Case report

The patient is an 18-year-old female with a past medical history significant for anxiety and depression who was referred to the adolescent medicine clinic for evaluation of severe malnutrition. She presented to clinic with a body mass index (BMI) of 14.16 kg/m² (height 162 cm and weight 37.1 kg, 66.2% mean estimated body mass index (MEBMI)) and was subsequently admitted to the disordered eating inpatient unit for refeeding. Per patient report, she had failed to gain weight from age 13 years and had recently lost 3 pounds. She struggled to eat and felt that her weight loss was due to a lack of energy, motivation, and appetite. She denied purposefully

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Table 1. The diagnostic criteria of avoidant/restrictive food intake disorder, anorexia nervosa, and body dysmorphic disorder according to DSM-5.

DSM-5 diagnostic criteria ^a		
<p>Avoidant/restrictive food intake disorder</p> <p>A. Eating or feeding disturbance as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one or more of the following:</p> <ol style="list-style-type: none"> 1. Significant weight loss. 2. Significant nutritional deficiency. 3. Dependence on enteral feeding or oral nutritional supplements. 4. Marked interference with psychosocial functioning. <p>B. The disturbance is not better explained by lack of available food or by an associated culturally sanctioned practice.</p> <p>C. The eating disturbance does not occur exclusively during the course of anorexia nervosa or bulimia nervosa, and there is no evidence of a disturbance in the way in which one's body weight or shape is experienced.</p> <p>D. The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder. When the eating disturbance exceeds that routinely associated with the condition or disorder and warrants additional clinical attention.</p>	<p>Anorexia nervosa</p> <p>A. Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. Significantly low weight is defined as a weight that is less than minimally normal or, for children and adolescents, less than that minimally expected.</p> <p>B. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight.</p> <p>C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.</p>	<p>Body dysmorphic disorder</p> <p>A. Preoccupation with one or more perceived defects of flaws in physical appearance that are not observable or appear slight to others.</p> <p>B. At some point during the course of the disorder, the individual has performed repetitive behaviors or mental acts in response to the appearance concerns.</p> <p>C. The preoccupation causes clinically significant distress or impairment in social, occupations, or other important areas of functioning.</p> <p>D. The appearance preoccupation is not better explained by concerns with body weight in an individual whose symptoms meet diagnostic criteria for an eating disorder.</p>

^aAmerican Psychiatric Association.

restricting and recognized that she was thin. She voiced a desire to gain weight and denied feeling overweight, having body image concerns, a fear of gaining weight, or body checking. She denied vomiting, hyperexercise, use of diet pills, or laxatives. She and her mother reported that she had always been a picky eater and that her selectivity had worsened over time; recently, she had become disinterested in most of the very few meals she had previously enjoyed. On most days, she ate one or two small "meals" which consisted mostly of small portions of cereal, chips, or other traditional snack foods.

The patient's depressive symptoms first began around age 8 years, and she had inconsistently taken fluoxetine secondary to difficulties swallowing pills (she refused liquid medications). She had been followed by a psychiatric specialist for both major depression and generalized anxiety disorder. She denied any current or previous thoughts of self-harm or suicidal ideation. Her family history was significant for anxiety, panic attacks, depression, and mild autism spectrum disorder (in a half-sibling). Her social history was significant for minimal activities and interactions, other than interactions with two close family members who lived with her. She very rarely interacted with others and did not socialize with friends her age. She had no history of learning issues or attention deficit hyperactivity disorder (ADHD) and had recently graduated from an online high school; she was not employed. She identified as female and denied a history of

drug use, trauma or abuse/violence. She reported regular, monthly menses.

On physical examination, the patient maintained her mask (COVID-19 precaution) and kept the hood from her sweatshirt far over her head. She responded as succinctly as possible to questions and did not initiate conversation or ask questions. Her vital signs reflected anxiety and her exam was remarkable only for cachexia.

Laboratory work-up included a complete blood count, comprehensive metabolic panel, calcium, magnesium, phosphorus, thyroid studies, Westergren sedimentation rate, urinalysis, toxicology screen, and celiac panel, all of which were within normal limits.

Hospital course

Upon admission, the patient began refeeding per protocol. She was restarted on fluoxetine (tapered up to 40 mg) and began hydroxyzine (50 mg three times daily as needed) and risperidone (0.5 mg at bedtime) for anxiety and depression. While hospitalized, it was noted that the patient had difficulty with staff coming in and out of her room; she believed she was being judged on her appearance but denied any thoughts or feelings that staff might harm her. Throughout her inpatient stay, she wore loose-fitting clothing as well as the hood from her sweatshirt over her head.

After admission, the patient's refeeding protocol included electrolyte supplementation for Days 1–5, slowly increasing caloric intake (starting at 1800 calories per day), and electrolyte monitoring for refeeding syndrome. She gained appropriately with expected weight plateaus as caloric intake was increased. With improved nutrition, she was appropriate, polite, and more willing to talk to her care providers.

Psychiatry was consulted 3 weeks into her hospital stay. With detailed questioning, the patient shared that since the age of 8 years, she had experienced the overall appearance of her face—including hair and lips—as “ugly.” She had felt constantly judged for these perceived facial imperfections. Objectively and on exam, there were no obvious, or subtle, imperfections to her face. Per mother, she has stated in the past that she is “the ugliest person in the world” and that “everyone thinks I am terrible.” Her mother reports the patient would stay in her bedroom when visitors came over, including family; the patient endorsed this observation and indicated she did not want people to see her face. The patient directly attributed her lack of appetite to depression related to her self-loathing.

After 6 weeks of hospitalization for refeeding, the patient's weight increased from 37.1 to 41.2 kg (BMI of 15.70 kg/m², 73.4% MEBMI). Per patient request, she was discharged to a partial hospitalization program for further treatment for BDD and severe depression. Follow-up for her disordered eating was arranged in the outpatient clinic.

Final diagnoses

Diagnoses include ARFID, BDD, generalized anxiety disorder, major depressive disorder, social anxiety disorder, and agoraphobia with panic attacks. Diagnoses met criteria of the DSM-5.

Discussion

This patient's severe malnutrition at presentation clearly warranted an investigation for a possible eating disorder. The patient's behaviors related to wearing a hoodie sweatshirt to hide her face and overall restriction of intake—in this case, related to depression—could easily have been mistaken for behaviors consistent with AN. Although the initial clinical picture was suspect for AN, the patient denied any concerns related to her weight, body size, or the idea of weight gain. The stated absence of these does not necessarily rule out AN, as some individuals may deny these concerns in order to protect their eating disorder from discovery and treatment.² To further complicate the differentiation of AN versus ARFID in general, Norris et al.³ observed that 12% of ARFID patients in one small study were subsequently diagnosed with AN either due to further symptom development or further elicitation of previously unacknowledged body image preoccupations and fear of gaining weight. This was not the case for this patient; in fact, she displayed no increased distress with weight gain during the refeeding process, thus

ruling out AN. In support of a diagnosis of ARFID, the patient experienced regular menses both before and during her hospital stay. This is consistent with data that differentiate menstrual patterns among those assigned female at birth with AN versus ARFID; those with ARFID have been noted to maintain more consistent menstrual patterns,⁴ possibly due to the consumption of food with higher fat content.⁵

This patient's body image concerns involved a long-standing hatred of face rather than weight or shape; thus, a diagnosis of BDD was made. Body distortions can be seen in both AN and BDD; however, those associated with AN tend to focus on fat deposition or size of stomach, hips, and legs and those in BDD tend to focus on facial attractiveness rather than body size.^{6,7} AN and BDD can be co-morbid.^{8,9} In this case, however, a diagnosis of AN was deemed highly unlikely as the patient endorsed both her thinness as well as her need to gain weight; in addition, she voiced a desire to gain weight—and, indeed, did gain weight—despite a struggle with appetite. Instead of AN, the DSM-5 diagnostic criteria for ARFID were met. Of the ARFID subtypes defined by Mammel and Ornstein, this patient had developed the emotional avoidance subtype, defined as “food avoidance leading to low weight associated with mood disturbance,”¹⁰ secondary to the depression related to her BDD.

Uniquely in this case, the presentation of severe malnutrition and the diagnostic dilemma between ARFID and AN helped elicit an additional, underlying diagnosis of BDD. Although temporally related, the two elements of weight loss and body image issues were not integrally related as they are in AN. This patient's underlying BDD was associated with the development of extreme self-loathing, depression, and anxiety that led to loss of appetite and the diagnosis of ARFID. While loss of appetite and some weight loss can be associated with depression, the severity of our patient's condition and need for inpatient hospitalization and refeeding justifies the additional diagnosis of an eating disorder, as included in the DSM-5 diagnostic criteria for ARFID. In our literature search, we have not found any similar cases of co-morbidity between ARFID and BDD reported.

Conclusion

In summary, our patient's self-loathing and BDD led to depression, and the associated loss of appetite and significant malnutrition subsequently resulted in a diagnosis of ARFID. This case highlights an interplay between disordered eating and BDD not yet described in the literature. Eating disorders can be complex, but when an eating disorder presents with a co-morbid diagnosis of BDD, it can be even more challenging to correctly diagnose and treat. The importance of differentiating between body image concerns in the setting of BDD and the distorted perceptions of body weight and shape seen in AN cannot be overstated. The proper identification and correct diagnosis are essential in providing treatment that is most beneficial to the patient.

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Author contributions

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