

Should gastrointestinal symptoms be considered a warning sign of anorexia nervosa?

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Abstract

Eating disorders are complex in their origin, presentation, and management. Individuals with eating disorders at times tend to hide their symptoms and their defensive secrecy and compulsive behaviours make it difficult to diagnose and treat these disorders. Gastrointestinal symptoms are commonly reported by

individuals with eating disorders but may be overlooked by clinicians.

Key words: eating disorder, anorexia nervosa, gastrointestinal symptoms, warning signs, constipation

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Introduction

Eating disorders are defined as ‘persistent disturbances of eating behaviour or behaviour intended to control weight, which significantly impairs physical health or psychosocial functioning’ (1). Anorexia nervosa, the most well-known eating disorder, is characterized by the active maintenance of an unduly low body weight and has the highest mortality rate of all psychiatric disorders (1,2).

Sufferers of anorexia nervosa may present with physical symptoms and or psychological symptoms (2). However, their defensive secrecy and compulsive behaviours make the diagnosis and treatment challenging (2).

We describe two adolescent females who presented with predominant gastrointestinal (GI) symptoms, where identification of an eating disorder and referral to specialized care was delayed despite being in continuous contact with health care providers for several months.

Case report 1

A 14-year-old female with perfectionist traits presented with chronic constipation, worsening over two years which was associated with dyspeptic symptoms and calorie restriction causing significant weight loss. Her family was also invested in her belief that constipation had resulted in her ritualistic and restrictive feeding patterns. They had consulted a family physician who had prescribed laxatives continuously for several months

after excluding organic causes for constipation. It also appeared that the patient was misusing the laxatives. She was referred to psychiatric services due to a two-week history of experiencing a sense of loss of control with depressive symptoms and suicidal ideas. The parents appeared to have focused more on her academic achievements and their personal struggles during the COVID-19 lockdowns and had failed to notice the above changes in their daughter. She has been called ‘chubby’ by a relative which initially led her to focus on her diet and she had been worried about missing schoolwork during the lockdown due to her illness. On examination, her body mass index (BMI) was 11.17 kg/m². She was also found to have cognitions characteristic of anorexia nervosa.

She was diagnosed with anorexia nervosa and required intensive inpatient rehabilitation with supervised gradual weight restoration, antidepressant treatment for secondary depressive disorder and psychosocial interventions.

Case report 2

A 13-year-old female diagnosed and managed for superior mesenteric artery syndrome (SMAS) presented to a general paediatric unit with a weight loss of 20 kg over one year period (BMI 8.6 kg/m²) due to extensive calorie restriction which she attributed to constipation and dyspeptic symptoms. She had been prescribed laxatives by a general practitioner which she had continued to

misuse over the last year. She engaged in behaviours such as calorie counting. She had minimal food intake and attributed this to loss of appetite secondary to gastric discomfort. We evaluated her for anorexia nervosa as her degree of disability could not be explained by organic causes. We noticed that she had an enmeshed relationship with her mother who reinforced her above behaviours and used her symptoms to reduce the patient's contacts with her father. This appeared to have further fuelled pre-existing parental conflicts. We also found that the parents were invested a lot in the academic achievements of the patient, and she was worried about missing schoolwork. The patient denied any concerns about her weight and shape; however, she had started dieting after she had gained weight during the initial weeks of the COVID-19 lockdown period. We noticed that the worsening of the above behaviours, along with her perfectionist traits, disturbed family dynamics and the sense of control the patient needed in stressful situations had resulted in her calorie restrictions which probably led to the development of SMAS. She required intensive multidisciplinary management, which focused on both physical and psychosocial aspects.

Discussion

Both the above patients were adolescents, who had perfectionist traits, coming from middle-class families with high expectations for academic achievement. They were going through difficult life circumstances due to family conflicts in the context of parental disharmony and social changes of the COVID-19 pandemic, including school closure. Both patients initially had ordinary efforts at dieting, which appeared to have spiralled out of control which is a general finding in anorexia nervosa (1). However, as was seen in our second patient, at times, parents or caregivers may not be aware of the patients' calorie restriction and loss of weight. Both patients had initially presented to primary care physicians with complaints of constipation resulting in loss of appetite. Both were prescribed laxatives which appear to have been misused by them. They had deteriorated significantly over the next few months, with alarmingly low BMIs and resultant physical and metabolic derangements on presentation, which had not been detected by the primary care clinicians, until they presented to a paediatrician who detected and referred them to psychiatry services.

GI symptoms are reported to be among the most troublesome symptoms of anorexia nervosa and are known to be some of the initial features patients appear to have when they present to primary care services (3). GI symptoms closely interact with dysfunctional and erratic eating patterns and may contribute to the genesis and/or maintenance of anorexia nervosa (4). A variety of causal mechanisms have been postulated for the occurrence of GI symptoms in eating disorders, including the effects of starvation, self-induced vomiting, laxative

misuse, primary GI abnormalities and psychological factors (3). The GI symptoms have been reported to have a significant impact on the quality of life, hinder nutritional rehabilitation and may even lead to life-threatening consequences in these patients (4).

Furthermore, the presence of GI symptoms may have a negative impact on the well-being of the patients and may indicate the need for intensive treatment and/or hospitalization (4).

Abdominal distention, postprandial fullness, early satiety, abdominal pain and altered oesophageal motility are some of the GI symptoms observed in anorexia nervosa (5). Irritable bowel syndrome, functional constipation, postprandial distress syndrome and SMAS are common physical conditions noted in patients with eating disorders (5). Acute gastric dilatation and gastric perforation may also result from binge eating (5). Self-induced vomiting may lead to dental caries, enlargement of salivary glands, electrolyte imbalances and gastro-oesophageal reflux, while laxative abuse may cause dehydration and electrolyte imbalances (5).

Despite the common occurrence of GI symptoms in eating disorders they appear to be overlooked by clinicians (5).

Evidence suggests that all patients presenting with chronic constipation and those who report symptoms such as bloating and abdominal pain should be screened for eating disorders (6).

Clinicians should be aware that GI conditions such as achalasia and coeliac disease may not only mimic those of eating disorders leading to a diagnostic confusion, but also may increase the vulnerability of patients to develop anorexia nervosa due to patients' focus on food intake, dietary restraint, body weight and food related abdominal complaints (4).

Conclusion

The above two cases highlight the importance of having a high index of suspicion for the presence of eating disorders when adolescents and/or young adults present to healthcare providers with GI symptoms and that features such as constipation and abdominal pain which occur with anorexia nervosa may be easily overlooked, by people closest to the individual. All clinicians, including primary care physicians, should pay attention to the early warning signs and symptoms of eating disorders as we discussed above, to prevent disastrous consequences.

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Author contribution

PKDHJLDSR, SHA and AGUSG were responsible for patient assessment, literature review and writing the manuscript. All authors approved the final manuscript.


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