

## Bulimia: A secretive turmoil

A 15-year-old girl was brought to a paediatrician by her parents who had received a call from the school guidance counsellor. The latter informed them that two of their daughter's friends had come to him with concerns that she had been vomiting in the school washroom. The girl's counsellor spoke with her directly, and she admitted to vomiting whenever she felt that she had eaten too much 'junk food'.

During the initial family interview, she appeared angry and embarrassed, but did not disagree with her parents. Without her parents in the room, she admitted that for the past year she had been trying to lose weight by dieting. She believed that her friends were thinner than her and that she was 'too fat'. She tried to eat only once a day at dinner and limited herself to 'healthy foods', such as fruits and vegetables. She avoided all fats and proteins, fearing that they had too many calories. However, by mid-afternoon she would become very hungry. She would try to eat a small amount of food, but found that once she started eating, she lost control and 'ate tons'. When this happened, she had a hard time remembering what she had eaten. After these episodes, she experienced overwhelming guilt, felt gross, feared gaining weight and had an intense desire to 'get rid of' what she had eaten. Although she disliked vomiting, it made her feel less guilty about the amount of food she ate. She would have liked to stop but feared gaining weight. The difficulties with losing control over her eating and then vomiting were present for the past six months. She denied overexercising or other forms of purging.

On physical examination, she was a healthy looking teen who communicated well, although appeared sad and had difficulty making eye contact. Her weight was 55 kg (50th to 75th percentile), height was 158 cm (25th to 50th percentile) and her body mass index was 22 kg/m<sup>2</sup> (50th to 75th percentile). Her heart rate was 72 beats/min lying down and 86 beats/min standing up; her blood pressure was 110/60 mmHg with no postural drop. Her general examination revealed multiple abrasions on her second and third right phalangeal metacarpals. A head and neck examination revealed evidence of painless bilateral parotid swelling. Her dental examination appeared normal. Her abdominal examination was positive for diffuse mild pain on palpation without evidence of any palpable masses, stool or organomegaly. There was mild pitting edema in both ankles.

An electrocardiogram showed a regular heart rate of 68 beats/min. Her blood chemistry revealed a serum potassium level of 3.0 mmol/L (normal 3.7 mmol/L to 3.8 mmol/L).

### LEARNING POINTS

- Bulimia nervosa (BN) is a common condition and is thought to occur in 1% of the adolescent population, with partial symptoms occurring in 3% to 6%. The incidence is perhaps more frequent (approximately 30%) in

adolescents who have a distortion of their body image and want to lose weight.

- Very little is known about BN in younger children (younger than 10 to 12 years of age) because patients often remain secretive. They do not necessarily have any overt physical manifestations of their illness and thus, the condition may go undetected for many years.
- BN is a cycle of eating dysfunction. The cycle begins with food restriction, which triggers an eating binge resulting in the need to compensate, often (but not exclusively) in the form of vomiting.
- BN in adolescents poses substantial medical and psychiatric morbidity, including fatigue, malnutrition, dehydration, dental enamel erosion, constipation, abdominal pain, esophageal tears (Mallory-Weiss syndrome), hematemesis, arrhythmias and congestive heart failure. Adolescents with BN have poor self-esteem and may be impulsive, have a depressive mood and have a history of self-harm or risk-taking.
- Physicians should look for Russell's sign (calluses or scars on knuckles or hands), frequent fluctuations in weight, enlarged and painless parotid glands, and menstrual irregularities, found in approximately one-third to one-half of adolescents with BN.
- Early recognition of BN in children and adolescents, consideration of comorbidities and electrolyte abnormalities (eg, hypokalemia), and prompt treatment are important because this will lead to early multidisciplinary intervention and improve the prognosis.
- Limited data from studies in adolescents suggest that cognitive-behavioural therapy or family-based treatment may be effective treatments. To date, one trial in adolescents with BN has shown that fluoxetine may be helpful in the treatment of bulimic symptoms. Further work in this area is needed.
- Between March 1 and July 31, 2008, the CPSP study on BN received 41 reports. The study aims to describe the behaviours and associated physical symptoms in children and adolescents on presentation, to identify psychiatric comorbid disorders and to describe the current treatment.

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