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Bulimia nervosa

What is bulimia nervosa?

Bulimia nervosa is an eating disorder broadly characterised by recurrent episodes of binge eating (eating an objectively large quantity of food with an associated loss of control), followed by engagement in compensatory behaviours (eg, self-induced vomiting, misuse of laxatives, diuretics or other medication, fasting, excessive exercise). These maladaptive compensatory behaviours are used to prevent or offset anticipated weight gain, with overvaluation of weight and shape.[1]

Bulimia nervosa epidemiology[2] [3]

- Up to 3% of females and more than 1% of males suffer from bulimia nervosa during their lifetime. Bulimia nervosa is reported worldwide among males and females from all ages.[4]
- The prevalence of bulimia nervosa in Europe has been reported as less than 1-2%.
- A systematic review looking at the prevalence of eating disorders worldwide found the weighted mean point prevalence for bulimia nervosa to be 1.5% for females and 0.1% for males.
- Peak age of onset is in later adolescence and young adulthood (age 15-25 years).
- Bulimia nervosa occurs across all socio-economic groups. It is more common in western societies.
- Many with bulimia do not seek treatment.[5]

Risk factors[2]

Development of bulimia nervosa appears to be multifactorial and difficult to ascertain. Apart from female gender, potential risk factors include:

- Parental and childhood obesity.
- Family dieting.
- Family history of eating disorders (high heritability shown).
- A history of severe life stresses and possibly sexual or physical abuse.
- Parental and premorbid psychiatric disorder or substance misuse.
- Parental problems, such as high expectations, low care and overprotection, and disruptive events in childhood such as parental death and alcohol dependency.
- Early experiences of criticism regarding eating habits or body weight.
- Perceived pressure to be thin (from cultural or family sources).
- Recreational pressure (models, jockeys, ballet dancers, athletes).
- Early menarche.
- Premorbid characteristics such as perfectionism, anxiety, obsessional traits, low self-esteem, emotionally unstable personality disorder (formerly borderline personality disorder), difficulty in resolving conflict.

Bulimia nervosa symptoms (presentation) [2] [3]

Most people with bulimia nervosa are young and of normal weight, or even overweight, making detection and diagnosis difficult. [6]

History

The history often dates back to adolescence. The core features include:

- Regular binge eating. Loss of control of eating during binges. (In order to fulfil diagnostic criteria for the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5), binge eating should occur, on average, at least once a week for three months.)
- Attempts to counteract the binges - eg, vomiting, using laxatives, diuretics, dietary restriction and excessive exercise.
- Body mass index (BMI) is maintained above 17.5 kg/m^2.

- Preoccupation with weight, body shape and body image. Self-evaluation is unduly based on body weight and shape.
- Preoccupation with food and diet. This is often rigid or ritualistic and deviations from a planned eating programme cause distress. The affected person therefore starts to avoid eating with others and becomes isolated.

Physical symptoms may occur including:

- Bloating and fullness.
- Lethargy.
- Heartburn and reflux.
- Abdominal pain.
- Sore throat and dental problems due to vomiting.

Mood disturbance and anxiety are common, as are low self-esteem, and self-harm. Severe comorbid conditions may be present - eg, depression and substance abuse.

Examination

Physical examination is usually normal and is mainly aimed at excluding medical complications such as dehydration or dysrhythmias (induced by hypokalaemia).

Examination must include height and weight (and calculation of the BMI) and blood pressure. In severe cases signs may be present:

- Salivary glands (especially the parotid) may be swollen.
- There may be oedema if there has been laxative or diuretic abuse.
- Russell's sign may be present (calluses form on the back of the hand, caused by repeated abrasion against teeth during inducement of vomiting).
- There may be erosion of dental enamel due to repeated vomiting.

Differential diagnosis[2]

- Binge eating disorder: more common than bulimia in men (although still less common than in women) and affects a wider age range.
- Sporadic bingeing in other psychiatric disorders - eg, depression.
- Anorexia nervosa with bulimic features.
- Other forms of eating disorder which can be difficult to classify - known as unspecified feeding or eating disorder (UFED) or eating disorder not otherwise specified (EDNOS).[7]
- Medical causes of bingeing or vomiting.

Investigations

- These are usually normal apart from serum potassium, which is often low.
- Renal function and electrolytes should be checked in view of frequent self-induced vomiting.

Bulimia nervosa treatment and management[8]

People with suspected bulimia nervosa should be referred immediately to a community-based, age-appropriate specialist eating disorder service for assessment and management. However, primary care has a significant role to play in patient management and support. The great majority of patients with bulimia nervosa can be treated as outpatients. There is a very limited role for the inpatient treatment of bulimia nervosa. This is primarily concerned with the management of suicide risk or severe self-harm, or for low serum potassium.

Management in adults

Guidelines from the National Institute for Health and Care Excellence (NICE) recommend that as a first step, patients should be encouraged to follow an evidence-based bulimia-focused guided self-help programme, with direct encouragement and support from healthcare professionals. Individual eating-disorder-focused cognitive behavioural therapy (CBT-ED), a specifically adapted form of CBT, should be offered to adults with bulimia nervosa if self-help is ineffective or not an option. The course of treatment is usually 20 sessions over 20 weeks, often with twice-weekly sessions initially.

Management in young people under the age of 18 years

NICE guidelines recommend bulimia-nervosa-focused family therapy as first-line management. This involves 18-20 sessions over six months with a therapist and involves the family in supporting and monitoring, and encouraging regular eating and reducing compensatory behaviours. If this is ineffective or not an option then the alternative is individual CBT-ED. This typically involves 18 sessions over six weeks, initially with more frequent sessions. Some sessions would involve the person's parent(s) or carer(s).

Pharmacological

NICE guidelines currently recommend that medication should not be offered as a sole treatment for bulimia. The evidence review found no evidence that pharmacological therapy is effective. Comorbid mental health problems may require pharmacological treatment.

Evidence

The evidence base for optimal treatment of bulimia nervosa remains weak. [9] Cochrane reviews seem to demonstrate efficacy of CBT, although quality of evidence is noted to be variable. [10]

General medical aspects

There may be a need for management of physical aspects:

- Patients with bulimia nervosa who are vomiting frequently or taking large quantities of laxatives (especially if they are also underweight) should have their fluid and electrolyte balance assessed frequently. If electrolyte disturbance is detected, it is usually sufficient to focus on eliminating the behaviour responsible.

- Recommend regular dental reviews and dental hygiene (eg, rinse the mouth after vomiting).
- Reduce laxatives slowly.
- Screen for osteoporosis.

For those with bulimia and diabetes, collaboration is required with the person, the diabetes team and the family. Sugars and ketones may need close monitoring, and be aware of the possibility of insulin misuse. Monitor potassium carefully.

Complications of bulimia nervosa[6]

- As a consequence of purging behaviours, pseudo-Bartter syndrome (characterised by hypokalaemic-hypochloraemic alkalosis and hyperactivity of the renin-angiotensin-aldosterone system) can develop due to chronic dehydration, placing patients at risk for electrolyte abnormalities and the rapid formation of oedema when purging is interrupted. Electrolyte and metabolic disturbances are the most common causes of morbidity and mortality.
- Diabetic patients who purge calories through manipulation of their blood glucose are at high risk for hyperglycaemia, ketoacidosis, and premature microvascular complications.
- Gastrointestinal complaints are common and include gastro-oesophageal reflux disease.
- Dental erosions.
- There may be painless enlargement of the salivary glands, tetany and seizures.
- Around 10-15% go on to develop anorexia.[2]

Prognosis[2] [3]

Up to 80% of people with bulimia make a complete recovery with treatment, although figures vary widely. One study found that, at 22 years, approximately two thirds of females with anorexia nervosa and bulimia nervosa had recovered. Recovery from bulimia nervosa happened earlier.[11]

The typical course of bulimia nervosa consists of cycles of remission and relapse.

Bulimia nervosa is associated with better recovery rates and lower mortality than anorexia nervosa. Between 30-60% of people with bulimia nervosa make a full recovery with treatment.

The reported all-cause standardised mortality ratio ranges from 1.6-1.9.

Further reading

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