eSantéMentale.ca

# Bulimia in Adults: Information for Primary Care

Image credit: Adobe Stock

**Sommaire :** Bulimia nervosa is an eating disorder characterized by 1) binge eating, 2) purging behaviours such as self-induced vomiting and excess exercise, and 3) dysfunctional thoughts surrounding their weight and body shape. Patients with bulimia nervosa can easily be missed because patients appear normal (or overweight) and may not spontaneously report having symptoms of bulimia. Management of bulimia nervosa generally involves includes psychotherapy (such as CBT) and may include medications (SSRIs such as fluoxetine).

## Case

| | |
|---|---|
| Identifying data | D. is a 24-yo nursing student. |
| Chief complaint | Fatigue and menstrual symptoms. |
| HPI | Multiple stressors this year: Academics, challenges with virtual learning, and breakup with her boyfriend.<br>Since the breakup, she has been trying to lose weight and exercise more.<br>As a result, has been spending increased time online, including watching 'health influencers'.<br>You ask her about what she is trying to do in order to be healthy, and she pauses uncomfortably... |

## Epidemiology

- Prevalence among young females 1-1.5% (DSM-5)
- 10:1 F:M
- Primary care physicians may encounter more patients with bulimia nervosa than anorexia nervosa because of its higher prevalence (Sim LA et al., 2010)
- Up to 70% recover with treatment (Roscoe C. 2015)

## Clinical Presentation

Due to shame and secretiveness, patients do not often openly report problems with bulimic symptoms, and the lack of obvious physical signs can similarly make it harder to be detected by professionals.
Patients may present to their physicians for other problems, such as:

- Seeking help for weight loss

- Physical symptoms
- Weight gain/loss
- Amenorrhea
- Fatigue
- Infertility
- Bowel irregularities
- Palpitations.
- Mental health
- Anxiety
- Depression

## Typical Signs/Symptoms

Classic symptoms from bulimia nervosa include:

| | |
|---|---|
| General | Dizziness, lightheaded, palpitations (due to dehydration, orthostatic hypotension, possibly hypokalemia) |
| Respiratory | Uncommonly aspiration pneumonitis or, more rarely, pneumomediastinum |
| Gastrointestinal | Pharyngeal irritation<br>Abdominal pain (more common among persons who self-induce vomiting)<br>Blood in vomitus (from esophageal irritation and more rarely actual tears, which may be fatal)<br>Difficulty swallowing<br>Bloating<br>Flatulence<br>Constipation / obstipation |
| Menstrual irregularities | Amenorrhea, or other problems with periods |

## Indications for Screening

Consider screening female patients who have the following risk factors

- Weight concerns
- Low self-esteem
- Depression/anxiety symptoms
- Obesity as a child and early pubertal maturation
- Family history of obesity
- History of sexual or physical abuse
- Certain occupations such as athletes, models, dancers

## Screening Questions

- **2-item screener**

    1. Do you ever eat in secret? (“Yes” is abnormal)
    2. Are you satisfied with your eating patterns? (“No” is abnormal)

    - Scoring: One abnormal response is 16% sensitive, whereas two positive responses is 91% sensitive; either warrants warrants further exploration (Freund, 1999).

- **5-items - The Eating Disorder Screen for Primary Care (ESP)**

1. Are you satisfied with your eating patterns? (“No” is abnormal)
2. Do you ever eat in secret? (“Yes” is abnormal)
3. Does your weight affect the way you feel about yourself? (“Yes” is abnormal)
4. Have any members of your family suffered with an eating disorder? (“Yes” is abnormal)
5. Do you currently suffer with or have you ever suffered in the past with an eating disorder? (“Yes” is abnormal)

- Scoring: A cutoff of 2 or more abnormal responses has been shown to be 100% sensitive with a specificity of 71%, and warrants further exploration (Cotton, 2003).

## History

Gather the following history (which may take a few visits):

| | |
|---|---|
| Goals | How can I be helpful? |
| HPI | When did the problems with eating start?<br>How has it changed over time? |
| Stressors | What makes the eating worse? |
| Resiliency factors | What helps? Who are the people that help? What are the activities or things which give you belonging, purpose, hope, meaning? |
| Eating behaviours | Dietary rules or rituals<br>Food avoidance<br>Contents of meals and snacks (food record) |
| Compensatory behaviours | Purging<br>Binge/purge cycles<br>Excessive exercise<br>Laxative use<br>Medication use |
| Weight history | Lowest and highest weights (at current height)<br>Perceived ideal weight |
| Menstrual history | Amenorrhea |
| Psychiatric comorbidities | Depression<br>Anxiety<br>Trauma<br>Self-harm<br>Suicidal ideation |

## Diagnosis

Essential features:

- Recurrent episodes of binge eating
- Recurrent inappropriate compensatory behaviours
- Self-evaluation that is overly influenced by body shape and weight
- Weight is typically within normal weight or overweight range

## DSM-5 Criteria

1. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
    1. Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time under similar circumstances
    2. A sense of lack of control over eating during the episode (feeling that one cannot stop eating or control what or how much one is eating)
2. Recurrent inappropriate compensatory behaviours in order to prevent weight gain, such as self-induced vomiting; misuse of laxative, diuretics, or other medications; fasting; or excessive exercise
3. The binge eating and inappropriate compensatory behaviours both occur, on average, at least once a week for 3 months
4. Self-evaluation is unduly influenced by body shape and weight
5. The disturbance does not occur exclusively during episodes of anorexia nervosa

Severity may be:

- Mild: 1-3 episodes of inappropriate compensatory behaviours / week
- Moderate: 4-7 episodes of inappropriate compensatory behaviours / week
- Severe: 8-13 episodes of inappropriate compensatory behaviours / week
- Extreme: 14+ episodes of inappropriate compensatory behaviours / week

## Differential Diagnosis and Comorbid Conditions

| | |
|---|---|
| Anorexia nervosa, binge-eating/purging type | Does the binge eating occur only during episodes of anorexia?<br>• If so, then consider anorexia nervosa, binge-eating/purging type |
| Binge-eating disorder | Is there binge eating, but without inappropriate compensatory behaviours?<br>If so, consider binge-eating disorder |
| Klein-Levin syndrome | Is there<br>• Hypersomnolence (need for excessive sleep) (e.g. up to 20 hrs/day)<br>• Hyperphagia (excessive food intake)<br>• Behavioural changes (e.g. increased sexual drive)<br>• Lack of concern about body shape / weight?<br><br>If so, consider Klein-Levin syndrome. |
| Borderline personality disorder | Are there:<br>• Significant problems with self-regulation? E.g. mood lability? Self-cutting?<br>• Fears of abandonment in relationships?<br>• Chronic feelings of emptiness?<br><br>If so, consider:<br>• Borderline personality disorder |

## Comorbidity

Most patients with bulimia nervosa have at least one other mental health concern:

- Depressive disorders
- Anxiety disorders (esp. GAD and social phobia)
- Substance abuse  (alcohol and stimulant use)
- Personality disorders (most commonly borderline personality disorder)
- Impulsivity/ risk-taking behaviours

## Physical Exam

| | |
|---|---|
| General appearance | Appears healthy<br>Within a normal or overweight range<br>Hoarse voice due to reflux<br>Decreased concentration and mood changes |
| Vitals | May be normal |
| HEENT | Permanent loss of dental enamel (especially lingual surfaces of front teeth)<br>Teeth may become chipped and ragged “moth eaten”<br>May have increased frequency of dental caries<br>Parotid gland enlargement |
| Cardiac | Arrhythmias (due to electrolyte abnormalities)<br>Palpitations and hypertension (due to diet pills)<br>Cardiomyopathy with the use of the emetic agent ‘Ipecac’ |
| GI | Bloating and flatulence<br>Constipation (due to laxative abuse)<br>Hematemesis<br>Esophagitis<br>Reflux |
| Extremities | Russell’s sign: Calluses (or scars) on the knuckles or back of the hand due to repeated self-induced vomiting over long periods of time<br>Peripheral edema |
| MSK | Muscle cramps (hypokalemia) |
| Gyne | Amenorrhea or oligomenorrhea |

## Investigations

Bulimia nervosa is a clinical diagnosis, however, investigations may be helpful for evaluating medical complications Laboratory abnormalities may occur due to purging:

- Fluid and electrolyte abnormalities – hypokalemia, hypochloremia, hyponatremia
- Metabolic alkalosis (high serum bicarbonate) due to loss of gastric acid
- Metabolic acidosis – frequent diarrhea or dehydration due to laxative and diuretic misuse
- Slightly elevated serum amylase
- Elevated BUN (dehydration)
- Hypoglycaemia
- Hypoestrogenism (associated with low bone mineral density)
- Consider ECG for arrhythmias and echocardiogram for cardiomyopathy

## Management: Overview

Role of the primary care provider:

- Assess medical complications
- Monitor weight
- Monitor nutrition status
- Serve as care coordinator
- Provide mental health support
    - Supportive strategies include:
        - Validating strengths: "Since our last visit, tell me about what has been positive, or things you

have been grateful for?"
- Identifying negatives / stressors: "What has been negative or stressful?"
- Problem-solving ways to cope with stressors: "Any ideas on what we can do about those stressors?"
    - In primary care, the focus is not to go into details on how to problem-solve each stressor, but more to make sure there is a plan or supports in place to help the person with their stressors, e.g. speaking with a counselor/therapist, etc.

Treatment setting

- Outpatient-based treatment is preferred and hospitalization is not necessary for most patients with bulimia nervosa.

Treatment modality

- CBT combined with Fluoxetine treatment is superior to either treatment alone.

## Indications for Hospitalization For Eating Disorder

| | |
|---|---|
| Poor intake and/or weight loss despite less intensive treatments | Persistent decline in oral intake, or a rapid decline in weight (> 1 kg/week) in patients who have already lost more than approximately 20% of their individually estimated healthy weights, despite maximally intensive outpatient or partial hospitalization.<br>Weight < 75% ideal body weight in child/adolescent<br><10% body fat or ongoing weight loss<br>Rapid, progressive weight loss |
| Abnormal vital signs | Orthostatic hypotension with an increase in pulse of 20 bpm or a drop in standing blood pressure of >10-20 mmHg (within a minute from lying to standing)<br>BP low < 90/60 mm Hg<br>Postural change in BP > 20 mmHg with signs of hypovolemia<br>Syncope<br>Bradycardia: HR <40 bpm in adult; HR <45 bpm in child/adolescent<br>Tachycardia: RR >110 bpm<br>Hypothermic body temperature < 35.5°C or 95.5°F |
| Metabolic abnormalities such as fluid / electrolyte imbalances | Hyponatremia: Na <130 mmol/L, (normal 136-145)<br>Hypokalemia: K < 2.3 mmol/L in adult; < 3.2 mmol/L in child (normal 3.5-5.10)<br>Hypophosphatemia: Phosphorus below normal on fasting (normal 0.81-1.58)<br>Magnesium <0.55 mmol/L (normal 0.74-1.03)<br>Hypoglycemia: Serum glucose <2.5 mmol/L (normal 3.8-11) |
| Other medical indications | Severe depression with suicide risk<br>Need for withdrawal from laxatives, diuretics or diet pills<br>Intractable vomiting<br>Esophageal tears, hematemesis<br>Uncontrolled comorbid diabetes, to supervise food intake, exercise and insulin intake.<br>Inadequate cerebral perfusion (e.g. confusion, syncope, altered level of consciousness).<br>Pregnancy if it is felt that the fetus is at risk.<br>Failure to respond to outpatient treatment. |

## Management: Psychological

Cognitive behaviour therapy (CBT) for Bulimia (Rushing JM et al., 2003):
3 phases in 20-week therapy

1. Education: help patients understand the disease and the actions perpetuating the situation with food records and binging/purging records
2. Broaden food choices and work on the dysfunctional thoughts concerning food and body

3. Maintenance and relapse prevention

## Management: Medications

SSRI

- Fluoxetine (Bulimia Nervosa Collaborative Study Group, 1992)
    - Only drug approved by the FDA for the treatment of bulimia nervosa
    - Decreases binge eating and vomiting (4 weeks of treatment)
    - Dosage
        - Start at 10-20 mg daily, and titrate up to 60 mg daily
        - Maximum 60 mg daily

## When and Where To Refer

Consider referring to an eating disorders program or eating disorders specialist if:

- Symptoms of the disorder are persistent
- Comorbid psychiatric or medical illnesses
- Risk of self-harm or harm to others

## Case, Part 2

You wonder if your patient might have problems with eating.
You screen further and she reveals that she copes with her stress through eating (e.g. eating a bag of potato chips, or a box of ice cream), however afterwards, feels extremely guilty.
As a result, she vomits several times a day (after meals or binges) and compulsively exercises at least 2-hrs a day.
You become worried about her eating behaviours, but stop yourself from lecturing her to stop binging.
You ask more about her stress and she tells you that she is so stressed, that she copes by eating.
You agree with her that indeed, she must be under incredible stress, if she is having to do what she is doing.
She breaks down crying, saying that nobody else understands this, and that all her family members criticize her.
You give her a Kleenex and after crying she tells you that she actually feels better having had a chance to let out her feelings.
Her vitals are normal, and she does not have any acute signs of dehydration or electrolyte imbalance that would make you wonder about admission to hospital.
You schedule a follow-up for a week's time, at which time you will:

- Explore her symptoms further,
- Continue with a motivational interviewing approach, and
- Give her options.

## Practice Guidelines

APA Practice Guideline for the Treatment of Patients with Eating Disorders Third Edition. June 2006.
Eating disorders: Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. NICE Guidelines [CG9], published Jan 2004.

## References

Cotton M, Ball C, Robinson P: Four Simple Questions Can Help Screen for Eating Disorders, J. Gen Intern Med. 2003 Jan; 18(1): 53-56.
CWEDP (2010) Putting Eating Disorders on the Radar of Primary Care Providers.
Callin J, Lamoureux M: Eating Disorders Toolkit for Primary Care Practitioners, 2018.
https://keltyeatingdisorders.c...

Fluoxetine Bulimia Nervosa Collaborative Study Group: Fluoxetine in the treatment of bulimia nervosa. A multicenter, placebo-controlled, double-blind trial. Arch Gen Psychiatry. 1992 Feb;49(2):139-47.
Freund KM, Boss RD, Handleman EK, Smith AD: Secret patterns: validation of a screening tool to detect bulimia., J Womens Health Gend Based Med. 1999 Dec; 8(10):1281-4.
Roscoe C. Eating Disorders Unit III Lecture. Presentation 2015. University of Ottawa Medical School.
Rushing JM, Jones LE, Carney CP. Bulimia Nervosa: A Primary Care Review. Prim Care Companion J Clin Psychiatry. 2003; 5(5): 217-224.
Sim LA, McAlpine DE, Grothe KB, et al. Identification and Treatment of Eating Disorders in the Primary Care Setting. Mayo Clin Proc. 2010; 65(8): 746-751.
Walsh JM, Wheat ME, Freund K. Detection, Evaluation, and Treatment of Eating Disorders The Role of the Primary Care Physician. J Gen Intern Med. 2000; 15: 577-590.

## About this Document

Written by Talia Abecassis (Medical Student, Class of 2017) and Khizer Amin (Medical Student, Class of 2016). Reviewed by Dr. Dhiraj Aggarwal, along with members of the eMentalHealth.ca Primary Care Team, which includes Dr's M. St-Jean (family physician), E. Wooltorton (family physician), F. Motamedi (family physician), M. Cheng (psychiatrist).

## Disclaimer



## Creative Commons License