



Resources for Sudbury are proudly managed by the Child and Family Centre (CFC).



Binge Eating Disorder (BED): Information for Psychiatry

Summary: Binge eating disorder (BED) is a common eating disorder characterized by eating large amounts of food in a short period of time. Treatment includes supporting patients with healthier eating behaviours. In certain cases, medications such as stimulant medications (which reduces impulsivity) can be helpful.

Epidemiology

BED is the most common eating disorder, as it is more prevalent than anorexia and bulimia combined. 12-month prevalence (DSM-5)

- Females 1.6%
- Males is 0.8%

In weight-control programs

- 15-50% in participants have BED

Neurophysiology

People with BED (compared to those without BED) appear to have

- Decreased reward sensitivities,
- Greater cognitive attentional biases toward food and altered brain activation in regions associated with impulsivity and compulsivity than individuals who do not have BED (Balodis, 2015; Kessler, 2016).

Dysregulation in dopamine systems, which mediates eating and reward-seeking behaviours underlies BED (Guerdjikova, 2016).

Clinical Presentation

Patients often seek medical or psychiatric care for consequences of BED rather than for concerns about the eating behaviours directly, hence it is often unrecognized.

Case

Identifying data	Ms. A is a 25-yo female.
Chief complaint	"I need help -- my eating is out of control!"
HPI	<p>Last month, boyfriend unexpectedly left her for her best friend.</p> <p>Other stressors include work and her difficult family. Since that time, she has been feeling anxious and depressed. Food has always been a comfort for her, and with her recent stresses, she found herself eating more than usual, e.g. can eat an entire bag of chips, or a pint of ice. Unfortunately, her eating has now gotten "out of control", to the point where she has gained significant amounts of weight, which has now become a stress.</p>

History / Screening Questions

Screening questions for eating disorders in general (CWEDP-2010):

- Are you unhappy with your body weight and shape?
- Are you dieting? Have you dieted much in the past?
- Have you lost weight?
- Some people eat large quantities of food in an out of control way. Has this ever happened to you?

Specific screening questions for Binge Eating Disorder (BED) (CWEDP-2010):

- Many people eat large quantities of food in an out of control way. Does this every happen to you? How often?
- How long does each eating session last?
- Many people, after eating in this way feel very badly. Do you ever feel badly about yourself after eating in this way?
- Many people try to compensate for this eating by getting rid of the food or compensating for it somehow. Has this ever happened to you? E.g. making yourself sick/exercising/using laxatives?
- Have you undergone any surgery to help with your weight concerns? E.g. bariatric surgery?

Diagnosis

Key features of binge eating are:

- Loss of control over amount of eating, often described as 'zoned out', and lacking ability to stop
- Marked distress over bingeing episodes
- Episodes that occur at least 1x per week for 3 months
- No compensatory behaviour following an episode

Binge Eating Disorder is not the same as overeating (Simla et al., 2010):

Binge Eating	Overeating
Marked distress over bingeing episodes, such as feelings of disgust, shame and guilt	With overeating, people may feel bad afterwards, but not to the same marked degree as with BED
Loss of control over amount of eating, often described as 'zoned out', and lacking ability to stop	With overeating, people have more a sense of conscious control
Eating in secret, i.e. binges usually happen while the person is alone	With overeating, people often overeat in the company of others
Eating rapidly	With overeating, people tend to eat at a normal rate

Physical pain

With overeating, people may feel a bit more full, but not causing the same physical pain that bingeing does

DSM-5 Criteria

DSM-5 Criteria for Binge Eating Disorder (BED)

- Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
 - 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 people would eat in a similar period of time under similar circumstances
 - 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)
- The binge-eating episodes are associated with 3 (or more) of the following:
 - Eating much more rapidly than normal
 - Eating until feeling uncomfortable full
 - Eating large amounts of food when not feeling physically hungry
 - Eating alone because of feeling embarrassed by how much one is eating
 - Feeling disgusted with oneself, depressed, or very guilty afterward
 - Marked distress regarding binge eating is present
- The binge eating occurs, on average, at least once a week for 3 months
- The binge eating is not associated with the recurrent use of inappropriate compensatory behaviour as in bulimia nervosa and does not occur exclusively during the course of bulimia nervosa or anorexia nervosa

Specifiers for severity of binge eating disorder

- Mild: 1-3 binge-eating episodes per week
- Moderate: 4-7 binge-eating episodes per week
- Severe: 8-13 binge-eating episodes per week
- Extreme: 14 or more binge-eating episodes per week

Differential Diagnosis

Bulimia nervosa	Are there compensatory bulimic behaviours (such as bingeing/purging) which might suggest bulimia? Binge eating episodes can be seen in both BED and bulimia With BED, there is no compensatory bulimia (unlike with bulimia)
Obesity	Is the patient overweight and/or obese? Many with BED are overweight and/or obese With obesity, there is overvaluation of body weight/shape, whereas there is not with BED If the full criteria for both BED and obesity are met, both diagnoses should be given.
Bipolar and depressive disorders	Does the patient have episodes of increased mood with decreased need for sleep? Does the patient have depression? Increased appetite and weight can be seen in both BED and bipolar/depressive disorders
Major depressive disorder	Does the patient have depressed mood, with neurovegetative symptoms such as problems with sleep, appetite, or weight gain? Increased appetite and weight gain If the full criteria for MDE and BED are met, both diagnoses can be given.
Borderline personality disorder	Does the patient have borderline personality disorder, i.e. tendency to feel insecure in relationships? Binge eating is an impulsive behaviour that is part of the DSM definition of borderline personality disorder If the full criteria for both disorders are met, both diagnoses should be given.

Comorbidity

Common comorbid conditions include

- Anxiety disorders, including social anxiety disorder (Fontenelle, 2003; Godart, 2002).

Physical Exam

Physical status (weight, height, and BMI). Individuals with BED are at risk of being overweight or obese.

Investigations

Routine investigations include :

- CBC
- BUN
- Creatinine
- Fasting insulin
- Electrolytes
- Fasting blood glucose
- Liver function tests
- Hormone panel

Management: Overall Goals

- Psychoeducation
 - Education about disordered eating, e.g. how hunger can lead to binges.
- Increase healthy eating habits and decrease unhealthy habits
 - Many BED patients are overweight or obese, however there is debate as to whether patients with BED should first be referred to behavioural weight loss programs or to a BED treatment program (Sim LA et al., 2010)
- Stress, coping and problem-solving
 - Identify top stresses with work, school, home, and relationships
 - Find alternatives to binge eating to manage this stress
 - Explore problem solving options, distraction strategies, exercise, meditation, mindfulness, relaxation exercises, etc.
 - Better cope with emotional distress
- Ensuring healthy lifestyle habits including:
 - Getting enough sleep
 - Having three regular meals, along with snacks, in order to reduce the chance of getting hungry and having a binge.
 - Removing unhealthy binge foods from the house
 - Afternoon snack if needed
 - Never go more than four hours without eating
 - Include foods that they like in the diet
- Behavioural strategies for weight control
 - Structured meal plan that reduces daily intake by 500-700 calories a day, and which allows a few hundred calories from preferred foods
- Monitor for complications
 - related to BED such as consequences of being overweight or obese

- Develop a long-term plan for relapse prevention
 - Build a support network
 - "Are there people in your life that you can turn to for support?"
 - Options include joining a support group, talking with family members or friends, or seeing a mental health professional

Management: Evidence-Based Therapies

Psychotherapeutic interventions shown helpful for binge eating disorders include:

- CBT
 - Focuses on changing thoughts (i.e. cognitive distortions) and behaviours that contribute to the binge eating
 - Cognitive distortions:
 - "I've already binged, so I might as well eat the rest of this bag of chips" "I didn't eat lunch, so I can eat this pint of ice cream", etc.
 - Behavioural strategies
 - Binge eaters tend to have irregular eating habits; thus, there is a strategy to have structure to eating behaviours (as mentioned earlier).
- Interpersonal Therapy (IPT)
 - Stresses with relationships may contribute to individuals using bingeing as a way of coping
 - Thus, patients may be helped by improving their relationships, such as by resolving conflicts, or increasing their positive social interactions
- Dialectical Behavioural Therapy (DBT)
 - DBT helps patients develop alternatives to binge eating as a way of coping with emotional distress
 - DBT helps patients develop skills such as
 - Acceptance
 - Distress tolerance,
 - Emotional and self-regulation skills
 - Using relaxation techniques instead of food to deal with anxiety

Management: Medications

Medication	Dosage
Stimulant <ul style="list-style-type: none"> • Lisdexamfetamine (Vyvanse) <ul style="list-style-type: none"> ◦ RCT evidence (McElroy, 2015; Hudson, 2017; Fleck, 2019). ◦ The only agent with an actual indication for BED. ◦ Generally well tolerated. ◦ Main side effect is dry mouth, decreased appetite, insomnia. • Methylphenidate 	Starting dose: 30 mg once daily in the morning Target dose: 50-70 mg once daily Maximum: 70 mg daily
Anti-convulsant <ul style="list-style-type: none"> • Topiramate (Topamax) <ul style="list-style-type: none"> ◦ RCT evidence for treatment of BED. 	Starting dose: 50 mg daily Target dose: 200 mg daily Maximum 600 mg daily (McElroy et al., 2003)
SSRIs	

• Citalopram (Celexa)	Starting dose: 10-20 mg daily Target dose: 20-40 mg daily Maximum: 40 mg daily
• Fluoxetine (Prozac)	Starting dose: 10-20 mg daily Target dose: 20-40 mg daily Maximum: 40 mg daily
• Fluvoxamine (Luvox)	Starting dose: 25-50 mg daily Target dose: 100-200 mg daily Maximum: 200 mg daily
• Sertraline (Zoloft)	Starting dose: 25-50 mg daily Target dose: 100-200 mg daily Maximum: 200 mg daily
TCA	
• Imipramine (Tofranil)	Starting dose: 100 mg daily Target: 100-200 mg daily Maximum 200 mg daily
• Desipramine (Norpramin)	Starting dose: 100-200 mg daily Target: 100-300 mg daily Maximum 300 mg daily

Reference: APA Practice Guidelines, 2006; McElroy et al., 2003

Indications for Referral to Specialized Mental Health Services

Does the patient have any of the following?

- Patient is medically unwell and needs intensive care and monitoring
- Risk of self-harm or harm to others
- Multiple comorbid psychiatric or medical conditions

If so, consider referring to specialized mental health services.

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

- Balodis IM, Grilo CM, Potenza MN. Neurobiological features of binge eating disorder. *CNS Spectr* 2015;20:557.
- Central West Eating Disorders Program (CWEDP) (2010) Putting Eating Disorders on the Radar of Primary Care Providers. Accessed Feb 26, 2019 from http://www.shared-care.ca/files/Eating_Disorders_Toolkit.pdf
- Fleck DE, Eliassen JC, Guerdjikova AI, et al. Effect of lisdexamfetamine on emotional network brain dysfunction in binge eating disorder. *Psychiatry Res Neuroimaging* 2019;286:53-9.
- Fontenelle LF, Vitor Mendlowicz M, de Menezes GB, et al. Psychiatric comorbidity in a Brazilian sample of patients with binge-eating disorder. *Psychiatry Res* 2003;119:189-94.
- Guerdjikova AI, Mori N, Casuto LS, et al. Novel pharmacologic treatment in acute binge eating disorder — role of lisdexamfetamine. *Neuropsychiatr Dis Treat* 2016;12:833-41.
- Godart NT, Flament MF, Perdereau F, et al. Comorbidity between eating disorders and anxiety disorders: a review. *Int J Eat Disord* 2002;32:253-70.
- Goldfein J, Devlin M, Spitzer R. Cognitive Behavioural Therapy for the Treatment of Binge Eating Disorder: What Constitutes Success? *Am. J. Psychiatry* 157:7, July 2000.

Hudson JI, McElroy SL, Ferreira-Cornwell MC, et al. Efficacy of lisdexamfetamine in adults with moderate to severe binge eating disorder: a randomized clinical trial. *JAMA Psychiatry* 2017;74:903-10.

Kessler RM, Hutson PH, Herman BK, et al. The neurobiological basis of binge eating disorder. *Neurosci Biobehav Rev* 2016;63:223-38.

McElroy et al.: Topiramate in the treatment of binge eating disorder associated with obesity: a randomized, placebo-controlled trial. 2003 Feb; 160(2): 255-61.

McElroy SL, Hudson JI, Mitchell JE, et al. Efficacy and safety of lisdexamfetamine for treatment of adults with moderate to severe binge-eating disorder: a randomized clinical trial. *JAMA Psychiatry* 2015;72:235-46.

Quilty LC, Allen TA, Davis C, et al. A randomized comparison of long acting methylphenidate and cognitive behavioral therapy in the treatment of binge eating disorder. *Psychiatry Res* 2019;273:467-74.

Roscoe C. Eating Disorders Unit III Lecture. Presentation 2015. University of Ottawa Medical School.

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.

Williams PM, Goodie J, Motsinger CD. Treating Eating Disorders in Primary Care. *Am Fam Physician.* 2008; 77(2):187-195, 196-197.

About this Document

Written by Khizer Amin (Medical Student, uOttawa Class of 2016) and Talia Abecassis (Medical Student, uOttawa Class of 2017). Reviewed by 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

Information in this pamphlet is offered 'as is' and is meant only to provide general information that supplements, but does not replace the information from a qualified expert or health professional. Always contact a qualified expert or health professional for further information in your specific situation or circumstance.

Creative Commons License

You are free to copy and distribute this material in its entirety as long as 1) this material is not used in any way that suggests we endorse you or your use of the material, 2) this material is not used for commercial purposes (non-commercial), 3) this material is not altered in any way (no derivative works). View full license at <https://creativecommons.org/licenses/by-nc-nd/4.0/>