**NURC-Binge-Eating Disorder**

**Description/Etiology**

Binge-eating disorder (BED) is a condition characterized by recurrent episodes of uncontrolled overeating. BED is diagnosed when an individual has recurrent episodes of binge eating at least 2 days a week for 6 months. At least three of the following behaviors are present with BED: rapid food consumption; eating until feeling uncomfortably full; eating large amounts of food when not hungry; eating alone due to embarrassment; and having feelings of guilt, shame, disgust, or depression after overeating. Individuals with BED usually experience binge-eating episodes as a response to significant stress. Unlike in bulimia nervosa, individuals with BED do not undertake inappropriate compensatory behaviors (self-induced vomiting, laxatives, medications, fasting, and excessive exercise); and contrary to anorexia nervosa, there is no restriction of food intake.

Although the cause of BED has not been completely understood, several mechanisms associated with an abnormal response to stress may be involved. These include an abnormal activation of the hypothalamic-pituitary-adrenal axis that interferes with feelings of hunger and fullness; a genetic predisposition that results in food addiction; low levels of serotonin, which lead to compulsive eating; and depression that leads to emotional eating.

Individuals with BED diet, lose weight, and then regain even more weight (called weight cycling). They feel distress and lack of control during and after binge-eating episodes, and have body image dissatisfaction and concern about the long-term health effects of their behavior. Medically related problems such as hypertension, diabetes mellitus type 2 (DM2), hypercholesterolemia, and cardiovascular disease have been associated with BED. Morbid obesity, defined as a body mass index (BMI) > 35 (normal BMI is 18.5–24.9) is diagnosed in some individuals with BED.

Treatment includes monitoring and regulating food intake, administering medications (e.g., antidepressants, medications for co-occurring conditions), and psychological support (e.g., cognitive-behavioral therapy [CBT]). Although binge-eating episodes may decrease or cease with treatment, weight loss may still be a challenge. Treatment is a lifetime effort and setbacks are normal.

**Facts and Figures**

The estimated prevalence of BED in adults is 3.5% in women and 2% in men, but up to 30% in persons seeking weight loss services. Males are affected by BED at much higher rates than they are by anorexia nervosa or bulimia nervosa. In a study of 969 college students, 10.7% of females and 6.9% of males met the diagnostic criteria for BED (Reslan & Saules, 2011).

Most adults with BED develop symptoms during adolescence. However, a recent study determined that most of the self-assessment tools used to aid in the diagnosis of BED are written at a reading level higher than recommended for patient materials (5th–6th grade). This may affect the ability of patients with limited literacy to understand and properly complete these tools, which may in turn affect the prevalence of BED among individuals with lower literacy (Richards et al., 2013). Estimates of individuals with BED who have less than a high school diploma have been estimated at 14 – 23% (Richards et al., 2013). Rates may be higher in ethnic and minority groups (Frank et al., 2012).
In a study of 78 treatment-seeking patients with BED, average weight gain in the prior 12 months was 22.2 pounds, with a range from a 30-pound loss to a 53-pound gain (Blomquist et al., 2011). The lifetime prevalence of a substance use disorder is as high as 33% in patients with BED.

**Risk Factors**

Social, biological, environmental, and psychological risk factors for BED include depression; substance abuse; body dissatisfaction; a history of childhood obesity; being a victim of childhood sexual abuse; type 2 diabetes; stressful life events; low self-esteem/self-worth; “yo-yo” dieting; feelings of anger, frustration, loneliness, or boredom; and social and/or cultural values that undermine healthy nutrition and appropriate eating behavior.

**Signs and Symptoms/Clinical Presentation**

Behavioral signs of BED include recurrent episodes of binge eating, eating much more rapidly than normal, a sense of lack of control during binge episodes, eating large amounts of food when not physically hungry, hiding food and eating in secret, eating until feeling uncomfortably full, and eating throughout the day with no planned meal times. Emotional and mental characteristics of individuals with BED include feelings of guilt, disgust, or depression during or after binging; tension; strong need to be in control; perfectionism; disgust about body size; social isolation; depression; and moodiness and irritability. Several conditions have been associated with BED and obesity, including hypertension, type 2 diabetes, hypercholesterolemia, cardiovascular disease, stroke, joint problems, fatigue, and difficulty walking and engaging in physical activities.

**Nutritional Assessment**

› **Patient Medical History**
  - Review the medical chart and ask about:
    - Medical conditions (e.g., diabetes, cardiovascular disease, hypertension)
    - Family history of medical conditions (e.g., diabetes, cardiovascular disease, hypertension, eating disorders, depression)
    - Medications and vitamins and other nutritional supplements
    - Level and type of regular physical activity (e.g., mobility level)

› **Physical Findings of Particular Interest**
  - BMI > 35 and hypertension may be present
  - Patient may complain of bloating, fatigue, constipation, abdominal pain, swelling in hands or feet

› **Patient Dietary History**
  - Conduct a diet analysis by asking the patient to complete a diet history (assess for calories, protein, and fat)
    - Useful tools for evaluating the patient’s strengths and weaknesses include a food frequency questionnaire and a 3-day diet recall that includes 1 weekend day
  - Ask about personal habits, including alcohol, caffeine, soda consumption; smoking; eating at night; and frequency of consuming fast foods and foods from vending machines
  - Ask about binge-eating behaviors:
    - eating large amounts of foods in a short period of time
    - eating excessive quantities of food due to a loss of control
    - eating foods quickly
    - eating until uncomfortably full
    - eating when not hungry
    - eating alone because of embarrassment
    - feeling depressed or guilty because of eating

› **Anthropometric Data**
  - Obtain patient’s height and weight; if appropriate, obtain patient’s waist circumference
  - Evaluate weight and calculate body mass index (BMI) by dividing body weight (kilograms) by height (meters squared); or 703 multiplied by weight (pounds) and divided by height (inches squared)
    - Underweight < 18.5; normal 18.5–24.9; overweight 25–29.9; obese > 30

› **Laboratory Tests and Diagnostic Tests of Particular Interest to the Nutritionist**
  - CBC, lipids, glucose, UA, and chemistry panel may be ordered
  - Serum electrolyte studies may show elevated bicarbonate, decreased potassium, and decreased sodium levels

› **Other Diagnostic Tests/Studies**
  - Chest X-ray may show abnormal lung status and enlarged heart
Treatment Goals

› **Restore and Maintain a Healthy Body Weight**
  - Encourage moderate weight loss to achieve a desirable, healthy body weight
  - Assess and encourage discussion about eating habits, attitudes about food and eating, and weight control strategies

› **Reduce or Eliminate Binge Behavior**
  - Encourage three meals per day plus snacks
  - Encourage the patient to avoid temptation by not keeping and/or stockpiling large quantities of unhealthy food choices
  - Encourage patient to avoid a “diet” mentality by thinking about healthy eating habits as a lifestyle change
  - Encourage the use of a food diary or tracker
  - Educate about recognizing physiological, not psychological, cues for hunger/fullness

› **Promote Healthy Eating Habits and Good Nutrition**
  - Educate patient on healthy eating, appropriate portion sizes, and meal planning using resources such as [http://www.choosemyplate.gov/](http://www.choosemyplate.gov/)

› **Manage Accompanying Diet-Related Medical Conditions Associated with Binge Eating**
  - Educate patient on carbohydrate controlled, low saturated fat, low sodium meal planning if patient has diabetes, hypercholesterolemia, hypertension, or other medical conditions managed by diet

› **Monitor for Medical Complications and Provide BED-Related Symptomatic Relief**
  - Request referral to a mental health clinician for evaluation and treatment of BED, related symptoms, and co-occurring mental health conditions (e.g., depression, anxiety); CBT is commonly recommended to treat BED

› **Provide Emotional Support and Educate**
  - Assess anxiety level and coping ability; educate and encourage discussion about potential complications of BED, treatment options, and individualized prognosis
  - Request referral to a social worker for identification of local resources for support groups and treatment programs (see below What Do I Need to Tell the Patient/Patient’s Family?)

Food for Thought

› Frequent dieting attempts among patients with BED, although associated with greater eating disorder pathology, may have a positive effect on metabolic abnormalities, including triglyceride and cholesterol levels

› Although previous studies have found that persons with BED report greater levels of hunger compared to controls, authors of a recent meta-analysis found that excessive hunger does not appear to precipitate binge eating (Haedt-Matt & Keel, 2011)

› BED is in the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*)

› A variety of diagnostic tools are available for assessing BED, including the Binge Eating Scale, the Eating Disorder Inventory, the Three Factor Eating Questionnaire, and the Food Craving Inventory

Red Flags

› Monitor for potentially serious medical complications of BED and obesity (see above Description/Etiology)

What Do I Need to Tell the Patient/Patient’s Family?

› When possible, provide written material on BED and its effects, to reinforce verbal education

› Encourage attending group therapy specific to existing co-occurring conditions and for social support from others who face similar health challenges

› Encourage becoming involved in a weight-loss program that encompasses exercise, nutrition, and behavior modification

› Provide educational material on common co-occurring disorders in BED patients, if available

› Ensure understanding of nutritional information (e.g., proper portions for size and weight, healthy food choices, meal planning) and encourage attending nutrition classes

› Emphasize the importance of continued mental health and individual nutrition counseling

› Encourage attending eating disorder support groups (e.g., Overeaters Anonymous)

References


