Current PSYCHIATRY

Beating OBESITY

Help patients control binge eating disorder and night eating syndrome

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These two eating disorders often can be treated successfully without referral to specialized centers.

Say "eating disorders," and young, thin, Caucasian women with anorexia or bulimia nervosa come to mind. Psychiatry outpatients, however, are more likely to have binge eating disorder (BED) or night eating syndrome (NES) and to be middle-aged, obese, male, or African-American.

Like anorexia and bulimia, BED and NES cause distress, impairment, and medical morbidity. But BED and NES are different because you can manage many patients without referring them to eating disorder treatment centers. You can improve patients' function and quality of life by:

- correcting eating disorder behaviors and thoughts
- identifying and managing psychiatric co-morbidity
- identifying and treating associated medical problems (usually obesity complications such as diabetes mellitus, hypertension, and dyslipidemia)
- helping them achieve and maintain a healthy (but realistic) body weight.

continued

Box 1

Provisional DSM-IV-TR criteria for binge eating disorder

A. 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 (eg, within any 2-hour period), an amount of food that is definitely larger than most people would eat in a similar period of time under similar circumstances
2. A sense of lack of control over eating during the episode (eg, a feeling that one cannot stop eating or control what or how much one is eating)

B. The binge-eating episodes are associated with three (or more) of the following:

1. Eating much more rapidly than normal
2. Eating until feeling uncomfortably full
3. Eating large amounts of food when not feeling physically hungry
4. Eating alone because of being embarrassed by how much one is eating
5. Feeling disgusted with oneself, depressed, or very guilty after overeating

C. Marked distress regarding binge eating is present.

D. The binge eating occurs, on average, at least 2 days a week for 6 months.

E. Binge eating is not associated with the regular use of inappropriate compensatory behaviors (eg, purging, fasting, excessive exercise) and does not occur exclusively during the course of anorexia nervosa or bulimia nervosa.

Source: American Psychiatric Association. *Diagnostic and statistical manual of mental disorders, 4th ed, text rev*. Washington, DC: American Psychiatric Association; 2000.

CHARACTERISTICS OF BED AND NES

BED and NES are coded as eating disorder, not otherwise specified in DSM-IV-TR, and their diagnostic criteria are provisional. Research criteria for BED are listed in Appendix B of DSM-IV (*Box 1*); diagnostic criteria for NES are being developed (*Box 2*).

Prevalence. How common are these eating disorders? Two small studies examined BED and NES prevalence in outpatient psychiatric populations. A European study found 4% of 234 psychiatry clinic patients met criteria for BED,[1] whereas 12% in 399 patients in two U.S. clinics met criteria for NES (with possibly higher rates in patients who took atypical antipsychotics).[2]

Demographics. Men experience BED and NES nearly as often as women, and distribution among women is similar across age groups.[3] Binge eating may be more common among African-Americans than Caucasians.[4]

Obesity. One-half or more of persons with BED or NES are obese, with body mass index (BMI) ≥30.[5,6] Obesity prevalence increases over time—from 22% at baseline to 39% 5 years later in one study of BED.[7]

Psychiatric comorbidity. Overweight or obesity increase the risk for early mortality and impaired quality of life.[8] Persons with obesity plus BED have poorer physical and psychosocial function and lower quality of life than do obese persons without BED.[9]

Structured clinical interviews of 128 obese subjects found higher rates of psychiatric disorders in those with BED. Obesity with comorbid binge eating increased lifetime relative risk:

- >6-fold for major depression
- >8-fold for panic disorder
- >13-fold for borderline personality disorder, compared with obesity alone.[10]

Similarly, overweight patients with NES have more depression, lower self-esteem, and more difficulty losing weight than those without

NES.[11] They meet criteria significantly more often for major depressive disorder, anxiety disorders, and substance use disorders.[12] Most NES patients view their nocturnal eating as shameful,[13] and distress and guilt are among the diagnostic criteria for BED.

Fortunately, successful treatment of BED or NES almost always improves comorbid medical and psychiatric conditions as well. Ongoing treatment is critical for sustaining weight loss.[14]

DIAGNOSIS AND EVALUATION

Start by asking overweight patients if they binge eat or do most of their eating at night. Follow up with questions to assess whether they meet provisional diagnostic criteria for BED or NES and to rule out other disorders in the differential diagnosis (*Box 3, page 20*). These include bulimia and sleep-related eating disorder, which is generally regarded as a parasomnia.

Obtain a history of the patient's eating disorder and weight, calculate BMI, and assess for psychiatric comorbidity.[15] Make sure blood pressure and fasting lipids and glucose are monitored in patients who are overweight (BMI ≥27) or obese (BMI ≥30).[16] Question patients with night eating about sleep disorder symptoms and use of hypnotics—especially short-acting benzodiazepines and zolpidem, which have been associated with sleep-related eating disorder.

CONTROLLING BINGE EATING

Cognitive-behavioral therapy (CBT), interpersonal therapy (IPT), dialectical behavior therapy (DBT), and medications have treated BED effectively in randomized, controlled trials:

- The psychotherapies are equally effective in decreasing bingeing but have little impact on weight.
- Medications are less effective in reducing bingeing but are associated with modest weight loss.

Box 2

Provisional criteria for night eating syndrome

- **Morning anorexia,** even if the patient eats breakfast
- **Evening hyperphagia,** in which ≥50% of daily energy intake is consumed after the evening meal
- **Awakening** at least once a night and eating snacks
- **Duration** of at least 3 months
- **Patient does not meet** criteria for bulimia nervosa or binge eating disorder

Source: Birketvedt GS, Florholmen J, Sundsfjord J, et al. Behavioral and neuroendocrine characteristics of the night-eating syndrome. *JAMA* 1999;282:657-63.

Psychotherapy. The most-studied intervention for BED is CBT, which leads to remission (abstinence from bingeing ≥28 days) in 50% to 60% of patients.[17] CBT techniques for BED adapt readily to self-help programs (*Box 4, page 25*).

In one study patients worked with a self-help manual while meeting biweekly with therapists for 15 to 20 minutes in individual sessions. They were randomly assigned to CBT, behavioral weight loss, or control (self-monitoring only) groups. At 12 weeks, remission rates were:

- 46% with CBT
- 18.4% with behavioral weight loss
- 13.3% for controls.

Patients in the intervention groups lost some weight, but no group showed significant changes in BMI.[18] The manual used in this study is available in bookstores and online (*see Related resources* for patients and clinicians).

Although somewhat less effective than therapist-led CBT, guided self-help is easy to implement in a general psychiatric practice.

continued

Box 3

Differentiating characteristics of four eating disorders

Disorder	Bulimia nervosa	Binge eating disorder	Night-eating syndrome	Sleep-related eating disorder
Morning anorexia	No	No	Yes	Yes
Evening hyperphagia	No	No	Yes	No
Eating pattern	Binges	Binges	Snacks	Snacks, unusual items
Compensatory behavior	Yes	No	No	No
Awareness of eating	Yes	Yes	Yes	No
Polysomnography	Normal	Normal	Low sleep efficiency	Sleep disorder
Treatment	CBT, SSRIs	CBT, SSRIs	Sertraline, relaxation	Treat sleep disorder; dopamine agonists

CBT: cognitive-behavioral therapy
SSRIs: selective serotonin reuptake inhibitors

A randomized, controlled trial compared CBT with IPT in 20 weekly group sessions. Post-treatment remission rates were equivalent—79% for CBT versus 73% for IPT—and weight in both groups was essentially unchanged.[19]

Abstinence rates after group DBT were 89% in a randomized, controlled trial of 44 women with BED. Binge eating improved significantly more in those assigned to DBT, compared with wait-listed controls. Differences in weight and mood were not significant, and abstinence rates slipped to 56% 6 months after DBT ended.[20]

Medications evaluated for BED in randomized, placebo-controlled trials include selective serotonin reuptake inhibitors (SSRIs) and a tricyclic, obesity management agents (sibutramine and orlistat), and topiramate (*Box 5, page 26*). Binge eating remission rates were highest with antidepressants, and patients lost the most weight with orlistat and sibutramine.

Combining CBT with medications or exercise has also been evaluated for BED in randomized, controlled trials:[21]

- Group CBT and fluoxetine, 60 mg/d, were compared with placebo in 108 patients. After 16 weeks, intent-to-treat remission rates were 22% (fluoxetine), 26% (placebo), 50% (CBT + fluoxetine), and 61% (CBT + placebo). Weight loss did not differ significantly among treatments but was associated with binge eating remission.
- Guided self-help CBT combined with orlistat, 120 mg tid, or placebo were compared in 50

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patients. After 12 weeks, intent-to-treat remission rates were significantly higher with orlistat (64% versus 36%) but not 3 months later (52% each). Weight loss of ≥5% was seen in 36% of those taking orlistat and in 8% taking placebo.

- Binge eating abstinence doubled when exercise (45 minutes. 3 times/week) was added to CBT; weight loss and mood also improved.

Little is known about appropriate dosages and durations for treating BED. Based on bulimia studies, most experts recommend higher-than-usual SSRI dosing (such as fluoxetine, 60 mg/d) and continuing treatment at least 6 months.[22]

Behavioral weight-loss programs have not been evaluated for BED in randomized, controlled trials. Obese persons with BED experience weight loss equivalent to that of those without BED, however, and more than one-half of persons with BED stop bingeing.[9]

Most programs combine reduced-calorie diets, increased activity, and behavior modification. Obese patients typically experience a 10% weight loss across 4 months to 1 year, but without continued intervention their weight returns to baseline.[23] Weight Watchers is one behavioral weight-loss program with documented efficacy in controlled trials.[24]

Advocating calorie restriction for binge-eating patients has been controversial because dieting plays a role in triggering and maintaining bulimia nervosa. Recent evidence suggests, however, that binge eating disorder can be safely managed with dieting. In a randomized, controlled trial, 123 obese women without BED were randomly assigned to 3 groups:

- 1,000 kcal/d liquid meal replacement
- 1,200 to 1,500 kcal/d diet of conventional food
- a non-dieting approach to weight control.

Weight and depressive symptoms declined significantly among women in the two dieting groups but not in non-dieters. More episodes of binge eating were observed in subjects on the liquid diet at week 28, but no differences were seen at weeks 40 and 65, and no subjects in any group developed bulimia or binge eating disorder.[25]

Surprisingly, a 2003 review found that weight loss treatment that ignores bingeing is as effective in reducing bingeing as treatment that focuses solely on that symptom.[22]

continued

Box 4

CBT principles for treating binge-eating disorder

Self-monitor
- Keep detailed records of all dietary intake
- Look for patterns in timing, type, and amount of food eaten
- Note antecedents and consequences of binges

Eat regularly
- Have 3 planned meals and 2 snacks per day
- Reduce cues to eat at other times

Substitute other behaviors for bingeing
- List pleasant alternate activities
- Recognize urges to binge
- Choose a substitute activity
- Review efficacy of substitute behaviors in preventing binges

Revise erroneous thinking patterns
- Reduce unrealistic expectations (especially about weight loss)
- Minimize self-criticism in response to lapses
- Change polarized thinking ("I've blown my diet; I may as well binge.")

Limit vulnerabilities to relapse
- Reduce concerns about weight and shape
- Address problems with self-esteem, depression, or anxiety
- Maintain realistic expectations

Source: Fairburn CG. *Overcoming binge eating*. New York: Guilford Press; 1995.

Box 5

Randomized, controlled trials of medications for binge-eating disorder (BED)

Medication	Dosage (mg/d)	Duration (weeks)	N	BED remission (%) Drug	BED remission (%) Placebo	Weight loss (kg)*
Citalopram	20 to 60	6	38	47	21	2.3
Desipramine	100 to 300	8	23	60	15	2.3
Fluoxetine	20 to 80	6	60	45	21	4.6
Fluvoxamine	50 to 300	9	85	38	26	1.7
Orlistat	120 tid	24	89	23	29	5.1
Sertraline	50 to 200	6	34	47	14	4.4
Sibutramine†	15	12	60	Not reported		8.8
Topiramate	50 to 600	14	58	64	30	4.8

* Difference between weight lost with drug and weight lost with placebo

† Sibutramine is a controlled substance (schedule IV) and is recommended only for obese patients with BMI ≥30 (≥27 if cardiac risk factors are present). Do not use with monoamine oxidase inhibitors or serotonergic agents, and monitor blood pressure.

Source: Carter WP, Hudson JI, Lalonde JK, et al. Pharmacologic treatment of binge eating disorder. *Int J Eat Disord* 2003;34:S74-S88

Recommendations. A variety of treatments may be effective for BED, but no guidelines exist to help you choose among them. CBT is considered the treatment of choice, but most overweight BED patients require adjunctive exercise, medication, or behavioral weight-loss treatment.

We recommend that you base each patient's treatment on five factors:

- treatment availability and cost
- past treatment response
- patient preference
- psychiatric and medical comorbidities
- BMI and past weight-loss experience.

For example, self-help CBT plus exercise or orlistat might benefit an obese man with bipolar disorder who was unable to tolerate adjunctive topiramate. An overweight depressed woman who needs weight-loss support could be given sertraline and encouraged to attend Weight Watchers.

Educate patients about realistic weight loss goals. A reasonable expectation is to lose 0.5 to 2 lbs/week, for a 10% loss across 6 months. Refer to guidelines for obesity risk assessment and treatment[23] when advising patients about exercise and weight loss.

TREATING NIGHT EATING SYNDROME

Research into NES is just beginning, and one small, randomized trial has been published. Twenty patients with NES were randomly assigned to sit quietly or practice progressive muscle relaxation 20 minutes/day for 1 week. Muscle relaxation was associated with improved stress, anxiety, and depression scores, along with trends toward reduced nocturnal eating.[26]

This study supports a role for stress and anxiety in NES and suggests a potentially effective treatment. These results need to be replicated, however. In other preliminary work:

• After 12 weeks of sertraline therapy (average 188 mg/d), 17 obese patients with NES were eating less often at night, taking in fewer calories after the evening meal, and awakening less often. Five patients (29%) experienced remission, with an average weight loss of 4.8 kg.[27]

• One of two NES patients treated with topiramate (mean dose 218 mg at night) experienced remission and the other a marked response. Sleep improved, and average weight loss was 11 kg across 8 months.[28]

• One woman, age 51, with NES and nonseasonal depression experienced remission of depression and NES after 14 phototherapy sessions. NES returned when light therapy was discontinued.[29]

Recommendations. Suggest that NES patients start progressive muscle relaxation (see *Related resources* for instructions, or patients can purchase audiotapes). If benefits are insufficient, consider adjunctive sertraline, topiramate, or phototherapy. The efficacy of self-help for NES has not been evaluated, although a manual is available (*see Related resources*).

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Bottom Line

Psychotherapies, medications, exercise, and behavioral weight-loss plans can improve binge eating disorder. For each patient, consider treatment cost and availability, past response, preferences, comorbid conditions, and weight-loss experience. For night eating syndrome, progressive muscle relaxation has shown benefit in a preliminary study.

continued

Related resources

For clinicians

- Devlin MJ, Yanovski SZ, Wilson GT. Obesity: What mental health professionals need to know. *Am J Psychiatry* 2000;157:854-66.
- Instructions for progressive muscle relaxation. www.webmd.com/hw/health_guide_atoz/ta4146.asp?navbar=hw153409.

For patients and clinicians

- *Anorexia and related eating disorders*. www.anred.com (information about BED and NES).
- Self-help manuals available at bookstores or at Gürze Books (www.gurze.com):
  - Fairburn CG. *Overcoming binge eating.* New York: Guilford Press, 1995.
  - Allison KC, Stunkard AJ, Thier SL. *Overcoming night eating syndrome: A step-by-step guide to breaking the cycle.* Oakland, CA: New Harbinger Publications; 2004.
- Weight Control Information Network (WIN). National Institute of Diabetes and Digestive and Kidney Diseases. http://win.niddk.nih.gov

DRUG BRAND NAMES

Citalopram • Celexa
Desipramine • Norpramin
Fluoxetine • Prozac
Orlistat • Xenical
Sertraline • Zoloft
Sibutramine • Meridia
Topiramate • Topamax

DISCLOSURES

Dr. Cloak owns Pfizer Inc. stock but otherwise reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

Dr. Powers reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

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