prolonged period of time. There is evidence that psychosis left untreated for substantial amounts of time may have a worse prognosis than illness that is treated in its prodromal or early phases. For this reason, judicious use of antipsychotics in a timely manner is recommended. The potential longer-term side effects of the medications (tardive dyskinesia, weight gain or diabetes, cognitive blunting) need to be weighed against the medication effectiveness. Using the smallest amount of medication possible to control the symptoms, exercise and nutrition plan, and close medication monitoring are required. Typical antipsychotics may be as effective as atypical antipsychotics and cause less weight gain. However, dystonias and the potential for tardive dyskinesia and negative symptoms may be of higher risk.

TIP

Be sure to take a careful assessment of the child's strengths, weaknesses, and environmental resources when devising a treatment plan. Focus on enhancing strengths, while intensively treating the most disabling symptoms.

17 Eating Disorders: Anorexia Nervosa and Bulimia Nervosa

Essential Concepts
Screening Questions

- How is your appetite?
- What do you think about your current weight?
- When you look in a mirror, what do you think about how you look?
- Do you ever make yourself throw up after you eat?

CLINICAL DESCRIPTION

Eating disorders in adolescence and young adulthood are quite common, especially in women. Dieting is very frequent, and attempts to be "as thin as possible" may evolve into a serious, disabling, and even life-threatening disorder. An estimated 10% of individuals with serious eating disorders die from complications of the disorder, and another 5% die from suicide.

The two primary eating disorders are anorexia nervosa, with extreme weight loss, and bulimia nervosa, marked by binge eating and often, although not necessarily, with purging (Tables 17.1 and 17.2).

KEY POINT

Individuals with eating disorders may be secretive about the disorder because they fear intervention or are ashamed. Typically, individuals with anorexia nervosa hide the fact that they are not eating for fear that they will be "forced" to eat more calories. Individuals with bulimia nervosa are often embarrassed about the disorder and will binge in secret. The clinician should always ask about eating and, with adolescents, also ask the family about their observations of a change in eating patterns or weight. Approximately 10 to 15% of eating-disordered individuals are male, with an especially high prevalence in gay men. Therefore, screening questions for eating disorders should be included in all interviews.

TABLE 17.1. DSM-IV-TR Criteria for Anorexia Nervosa

Mnemonic: **W**eight **F**ear **B**others **A**norexics
Refusal to maintain body **W**eight above 85% of expected weight
Intense **F**ear of gaining weight or becoming fat
Distorted **B**ody image
For women: **A**menorrhea (the absence of at least three menstrual cycles)
Types: Restricting type or binge-eating/purging type

Adapted from American Psychiatric Association (2000), Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Text revision. Washington, DC. American Psychiatric Association.

Epidemiology

Among women, the lifetime prevalence of anorexia nervosa is 0.5 to 1% and of bulimia nervosa about 4%. Most commonly, the disorder starts in adolescence, often precipitated by a stressful life event. When anorexia nervosa occurs in prepubertal children, it tends to be part of more severe psychopathology, but it is also more likely to resolve. Females are affected 10 times more often than males. The eating disorders tend to be diseases of Westernized countries. In the United States, Whites are more often affected than African Americans or Hispanic Americans.

Etiology and Risk Factors

A combination of biologic, psychological, environmental, and social factors has been implicated in the pathogenesis of eating disorders. Both anorexia and bulimia nervosa are more

TABLE 17.2. DSM-IV-TR Criteria for Bulimia Nervosa

Mnemonic: **B**ulimics **O**ver-**C**onsume **P**astries
Recurrent episodes of **B**inge eating (at least twice a week for 3 months) that feel **O**ut of control
Excessive **C**oncern with body shape and weight
Purging behaviors, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; excessive exercise
Types: Purging type or nonpurging type

Adapted from American Psychiatric Association (2000), Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Text revision. Washington, DC. American Psychiatric Association.

common in high-risk groups that require highly focused attention on weight and appearance, such as ballet, ice-skating, and other sports. High achieving, perfectionistic, competitive individuals with underlying low self-esteem tend to be more commonly affected. Mood disorders, anxiety disorders, substance use, and personality disorders tend to be common comorbidities. Individuals with anorexia nervosa tend to be exquisitely sensitive to perceived rejection, hostility, and conflict. From a family theory perspective, anorexic families often present a conflict-free exterior. This façade is thought to mask a lack of intimacy, enmeshment, rigidity, and conflict. The symptoms of anorexia are thought to focus the family away from the conflict and thus maintain family "homeostasis." In fact, once a pattern of disordered eating begins, multidetermined factors maintain and promote the dysregulated eating patterns. These may include stabilization of the family, binding of anxiety and dysphoria, and positive reinforcement emanating from compliments about weight loss that may be received from coaches or friends.

KEY POINT

Severe eating disorders are among the most challenging disorders to treat. Engagement of the patient may be very difficult, as he or she often does not want to gain weight and will engage in increasingly secretive and deceptive maneuvers to avoid taking in calories. I have seen girls sew lead weights into their underclothing prior to being weighed to avoid their weight loss being detected. This lack of joint and collaborative vision of treatment is one of the most difficult aspects of the disorder. Sensitivity and empathy for the patient, along with steadfast adherence to basic physical safety guidelines, are the cornerstones of all treatment.

TIP

Although eating-disordered patients may be furious about the limits placed in the course of treatment, they are also often relieved that there is external control at a time when they feel out of control.

KEY POINT

Body mass index (BMI: kg/m^2) is used to indicate the degree of severity of anorexia nervosa in an individual. A BMI of 17.5 kg/m^2 correlates with a body weight of less than 85% of the expected.

Assessment

When assessing the child or adolescent for whom you suspect an eating disorder, it is important to ensure an appropriate medical workup and to consider comorbidities, which tend to be common (Table 17.3).

TABLE 17.3. Assessment Essentials for Eating Disorders

1. A comprehensive physical examination is necessary to rule out organic causes of anorexia. Additionally, the physical examination and laboratory assessment should screen for malnutrition and substance use. Anorexia nervosa may present with cachexia, dry skin, lanugo, bradycardia and hypotension, amenorrhea, mild anemia, low serum albumen, and a variety of other abnormalities depending on the degree of cachexia. Bulimia nervosa may present with decreased gag reflex, moth eaten or rough teeth, hypertrophy of the parotids, and electrolyte imbalances.
2. Historic data should be collected from multiple sources. Expect the eating-disordered youth to minimize his or her symptoms and the parents to have significant gaps in their observations of pathologic eating patterns.
3. Psychiatric comorbidity should be identified because eating-disordered patients commonly suffer from comorbid depressive disorders, substance abuse, anxiety disorders, and personality disorders.
4. Family dynamics should be assessed because eating-disordered behaviors tend to exacerbate pathologic family interactions, and such interactions impede recovery.
5. Screening tools such as the "SCOFF" or the Eating Disorders Diagnostic Scale questions may be useful in identifying eating-disordered youths when reviewing mental health status.

TIP

Ask about substance experimentation and follow up with toxicology screens for all bulimia patients. If suspected, screening for laxative and diuretic use is also advised.

CLINICAL VIGNETTE

You are asked to evaluate a 17-year-old junior in high school in late spring. She has been diagnosed with ulcerative colitis, which has been stable for the past 6 months. Despite the fact that her medical condition has stabilized, she has demonstrated ongoing weight loss and dysphoria. Upon meeting, you note that she tends to minimize the effect of her medical issues on her life, and to be quite unconcerned about her recent 18-lb weight loss. She is dressed in baggy sweatshirt and baggy sweat pants, and appears quite cachectic. She denies restricting her food intake, stating that she is just "not hungry." She is quite happy that she does not presently require steroids, as they "made me fat." She has joined the cross-country team and runs at least 4 miles daily. You highly suspect anorexia nervosa, which had its onset with the stress of the medical issues and the weight gain associated with prednisone for her colitis. Her family, with high achieving, intense parents, had not noted how significant her weight loss was until it was brought to their attention in a follow-up visit with the gastroenterologist. The girl states that she is "fine" and tells her parents she does not need a "shrink"; she doesn't know why they even brought her to one. She is medically at a BMI of 17.3 kg/m^2 and is determined to be safe for outpatient treatment. You recommend an intensive program of outpatient psychotherapy, family therapy, weekly weights, and close medical follow-up. You consider a trial of fluoxetine for treatment of obsessionality and depression.

Treatment

Treatment of children and adolescents with eating disorders is assumed to be the same treatment that is effective in adults, with modifications for developmental stage and environmental

circumstances. In general, family engagement and family therapy are cornerstones of treatment. No specific medications target eating disorder per se. For that reason, using medications only as needed for specific target symptoms and comorbidity is advised. Table 17.4 gives the essentials of treatment.

TABLE 17.4. Essentials of Multimodal Treatment of Eating Disorders

1. Psychoeducation of parents and youth about the nature of the illness and the necessity of intensive treatment.
2. Determine level of care (inpatient, residential, partial hospital, intensive outpatient, or regular outpatient treatment) that is appropriate depending on the severity of the disorder and medical compromise.
3. Set behavioral goals for improving medical and nutritional status.
4. Reestablish eating as a process based on hunger and satiety cues as well as nourishment needs (e.g., meal support therapy [MST]).
5. Family therapy with a focus on decreasing enmeshment and parental control while facilitating the youth's individuation and minimizing dynamics that promote disordered eating.
6. Developing the patient's and family's tolerance for negative emotions, including the use of anxiety management skills.
7. Supportive psychotherapy, rapport and trust-building, and cognitive-behavioral treatment to help develop adaptive cognitive techniques for addressing the distortions regarding weight and body image.
8. Specific skills building regarding development of a balanced lifestyle, including work, play, and social relationships.
9. School interventions may be required to ensure that the patient is able to maintain appropriate academic progress, while decreasing excessive anxiety and hours of perfectionistic re-doing of homework. The school nurse and mental health professionals in the school need to be aware of and follow any treatment plans.
10. Medications—there are no medications specifically targeting eating disorders.

    1st line: Selective serotonin reuptake inhibitors. For treatment of obsessionality, depression; may help in reducing risk of relapse.

    2nd line: Atypical antipsychotics: risperidone, olanzapine. May be used to facilitate weight gain in anorexic patients by reducing anxiety and thought distortions and increasing appetite.

    Other medications as appropriate for targeted symptoms and comorbid conditions.

(Continued)

TABLE 17.4. Essentials of Multimodal Treatment of Eating Disorders (*continued*)

Note: Recommendations are primarily drawn from the adult literature, as there are few controlled trials with adolescents. In general, medication is used for specific target symptoms and comorbidities. Start low and go slow, and monitor vital signs and electrocardiograms.

TIP

Patients with eating disorders are often quite reassuring to their therapist that they are okay and have their eating issues under control. Be sure to not fall into the trap of agreeing with the patient in minimizing serious symptoms. Although inpatient treatment of eating disorders is becoming less common, ongoing weight loss in the face of medical compromise requires intensive medical and psychiatric stabilization (often on medical floors or combined medical/psychiatric units).