ANOREXIA NERVOSA AND BULIMIA NERVOSA

What the hospitalist needs to know about CPT 269.9, or nutritional insufficiency

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The term “nutritional insufficiency” (NI) is used to encompass the medical and nutritional complications of eating disorders, including anorexia nervosa and bulimia nervosa. Eating disorders have the highest morbidity of any psychiatric illness, with as many as 2% to 10% of individuals dying of the medical complications of anorexia nervosa annually (1-3). The death rate for anorexia nervosa is up to 12 times higher than the mortality rate of all other causes of death for adolescent girls and young adult women (4-6). In addition, the medical complications caused by and/or exacerbated by disordered eating are myriad.

Hospitalists play a fundamental role in the initial identification and management of patients with NI. Acute malnutrition is a medical emergency that can occur at any given body weight, not just at an extremely low weight. Hospitalists should focus their efforts mostly on individuals with continued restrictive eating behaviors, laxative abuse, diet pill or diuretic abuse, and purging, for whom outpatient efforts to redirect harmful behaviors have failed.

Most important, hospitalists should recognize the life-threatening complications of refeeding syndrome and be aware of the current protocols for its treatment. Early recognition and timely intervention, based on a developmentally appropriate, evidence-based, multidisciplinary team approach (including medical, psychological and nutritional components), represent the ideal standard of care.

The research in this field is continuously evolving, as is the current knowledge of pathophysiology, clinical recognition and inpatient management of NI and eating disorders. This article will review epidemiology, medical pathology, and the role of an inpatient pathway to treat NI.

EPIDEMIOLOGY

Currently in the United States, anorexia nervosa and bulimia nervosa are clinically present in approximately 0.5% and up to 5%, respectively, of adolescents and young adults. The female-to-male ratio is approximately 10 to 20 to 1 (1-6). Eating disorders have increasingly been described in younger populations and in boys (Peebles et al., Rome et al. Unpublished data) as well as in minority populations and the indigent, along with white upper-middle-class girls and young women.

There are multiple risk factors for both disorders (AN and BN), including family history of obesity or eating disorders; mood disorders and/or alcoholism in the immediate family; parental eating behavior; the practice of ballet, gymnastics, modeling or any “visual sport”; personality traits of perfectionism and rigidity; practice of compulsive exercise; history of excessive diets and missing meals; body image refusal; low self-esteem; and physical and sexual abuse (1).

INITIAL SCREENING

Patients are generally admitted to the hospital with overt manifestations of malnutrition. The table below outlines standard criteria for admission. These complications may be highly visible when an adolescent or adult loses weight from 110 pounds to 70 pounds over several months. However, the same medical complications can occur yet be “invisible” in the patient who goes from 200 pounds to 160 pounds in the same time period. In fact, the latter patient may be just as critically ill with respect to loss of heart muscle or abnormal rhythm but be cheered for his or her “obvious success” in addressing obesity.

A thorough history should be pursued, as outlined in the box on page 39, documenting the rate and amount of weight loss, the number and type of meals missed, the presence of purging behaviors, and the patient’s weight and body composition.

Criteria for inpatient admission of a patient with nutritional insufficiency

- Patient’s weight <75% of ideal body weight, or weight loss despite treatment
- Refusal to eat
- Body fat <10%
- Bradycardia (heart rate 50 bpm at daytime, <45 bpm at bedtime)
- Systolic blood pressure <90 mm Hg
- Orthostatism
- Temperature <35.5°C (96°F)
- Dysrhythmias, prolonged QTc
- Syncope
- Severe hypokalemia (potassium <3.0 mEq/L)
- Severe hypochloremia (chloride <90 mEq/L)
- Esophageal laceration
- Suicidal ideation
- Hematemesis
- Intractable emesis