Bulimia nervosa is an eating disorder that, like anorexia nervosa, is of psychological origin and can have horrible physical consequences. While anorexics simply starve themselves, bulimics “cleanse” themselves of vomiting they have caused themselves or other forms of dealing with extra calories. Bulimics also often use weight loss pills, laxatives and diuretics to lose weight, but also use extensive exercise or fasting. Unlike anorexic people, they are usually of normal build, sometimes even bigger, while in combination with anorexia they are extremely thin. Cleansing can have two purposes: preventing weight gain, and temporarily relieving depression and other negative feelings.

Introduction

Bulimia nervosa (BN) is an eating disorder with a characteristic pattern of recurrent binge eating followed by purging [1]. Bulimics overeat because food gives them a feeling of comfort. However, overeating makes them feel out of control. Then, feeling ashamed, guilty, and afraid of gaining weight, they purge. Basically, this disorder represents a loss of control about overeating and the compensatory behavior of purging for the purpose of regaining a sense of control. Individuals with bulimia nervosa tend to be of normal weight and “low calorie” or “careful restrictive” eaters between episodes of bingeing and purging. About 1.0%–1.5% of females have this disorder, which begins in adolescence and remains a pattern through early adulthood. The female-to-male ratio is 10:0. This disorder must be distinguished from the binge/purge subtype of anorexia nervosa (AN). Both bulimia nervosa and this subtype involve binge eating and purging. However, whereas the anorexic is unable to maintain even minimal weight, the bulimic contains purging sufficiently to maintain body weight that is minimally normal or above normal level. Bulimia nervosa can also be distinguished from binge eating disorder, where there is bingeing but no purging.

Eating Disorders

Eating disorders can be viewed on a continuum, with clients with anorexia eating too little or starving themselves, clients with bulimia eating chaotically, and clients with obesity eating too much [2]. There is much overlap among the eating disorders; 30% to 35% of normal-weight people with bulimia have a history of anorexia nervosa and low body weight, and about 50% of people with anorexia nervosa exhibit the compensatory behaviors seen in bulimic behavior, such as purging and excessive exercise. The distinguishing features of anorexia include an earlier age at onset and below-normal body weight; the person fails to recognize the eating behavior as a problem. Clients with bulimia have a later age at onset and near-normal body weight. They are usually ashamed and embarrassed by the eating behavior.

More than 90% of cases of anorexia nervosa and bulimia occur in women. Although fewer men than women suffer from eating disorders, the number of men with anorexia or bulimia may be much higher than previously believed, many of whom are athletes. Men, however, are less likely to seek treatment. The prevalence of both eating disorders is estimated to be 2% to 4% of the general population in the United States. In addition, a majority of the general population is dissatisfied with body image and preoccupied with weight and dieting at some point in their lives.

Pathology

Bulimia nervosa usually begins in late adolescence or early adulthood; 18 or 19 years is the typical age of onset [2]. Binge eating frequently begins during or after dieting. Between binging and purging episodes, clients may eat restrictively, choosing salads and other low-calorie foods. This restrictive eating effectively sets them up for the next episode of binging and purging, and the cycle continues. Clients with bulimia are aware that their eating behavior is pathologic, and they go to great lengths to hide it from others. They may store food in their cars, desks, or secret locations around the house. They may drive from one fast-food restaurant to another, ordering a normal amount of food at each but stopping at six places in 1 or 2 hours. Such patterns may exist for years until family, friends discover the client’s behavior, or until medical complications develop, for which the client seeks treatment. Follow-up studies of clients with bulimia show that as many as 25% or more are untreated. Clients with bulimia had 45% full recovery, while 23% remained chronically ill. One third of fully recovered clients relapse. Clients with a comorbid personality disorder tend to have poorer outcomes than those without. The death rate from bulimia is estimated at 3% or less. Most clients with bulimia are treated on an outpatient basis. Hospital admission is indicated if binging and purging behaviors are out of control and the client’s medical status is compromised. Most clients with bulimia have near-normal weight, which reduces the concern about severe malnutrition, a factor in clients with anorexia nervosa.

Symptoms

Bulimia nervosa is an eating disorder characterized by binge eating coupled with compensatory behaviors intended to promote weight loss such as self-induced vomiting, laxative abuse, excessive exercise, or prolonged fasting [3]. Approximately one third of patients with AN “cross over” to BN at some other time in their illness.

i. Signs
   a. body weight is usually normal or above normal;
   b. calluses on the dorsum of the hand secondary to abrasions from the central incisors when the fingers are used to induce vomiting (Russell sign)
   c. painless enlargement of the salivary glands, particularly the parotids
   d. dental enamel erosion (perimolysis)
weight fluctuations
edema (fluid retention)

ii. Symptoms
a. weakness and fatigue
b. headaches
c. abdominal fullness and bloating
d. nausea
e. irregular menses
f. muscle cramps
g. chest pain and heartburn
h. easy bruising (from hypokalemia/platelet dysfunction)
i. bloody diarrhea (laxative abusers)

iii. Diagnosis
iv. Medical conditions
a. chronic cholecystitis
b. cholelithiasis
c. peptic ulcer disease
d. gastroesophageal reflux disease
e. supraventricular tachycardia syndrome
f. malignancies (including CNS tumors)
g. infections—acute bacterial and viral gastrointestinal infections, parasitic infections, hepatitis;
h. Pregnancy
i. oral contraceptives—nausea can be a side effect of oral contraceptives and hormone replacement therapy;
some medications have side effects that may include nausea and vomiting, or food cravings.

2. Psychiatric conditions
a. anorexia nervosa binge/purge subtype;
b. binge eating disorder;
c. major depressive disorder with atypical features;
d. borderline personality disorder;
e. Kleine-Levin syndrome.

Purging
Purging typically involves self-induced vomiting, fasting, over exercising, or using medicines like laxatives to induce diarrhea and/or excessive bowel movements. The binge/purge experience is often hidden, occurring during the night or when alone, and bulimics become skilled at inducing vomiting and using diuretics and exercise. Purging can lead to serious and even life-threatening medical conditions. These include dental problems like tooth decay, gum disease, and loss of tooth enamel that result from acid in the mouth following vomiting. It can also lead to osteoporosis (bone thinning), kidney damage, and fat cardiac arrhythmias (abnormal heart rhythms). Laxative dependence is a common complication of this disorder. Dentists and dental hygienists have a key role in identifying bulimia nervosa since they are often the first to recognize the dental damage caused by purging.

Complications
Bulimia nervosa is a disabling disorder that has a profound impact on the lives of those affected. Bulimia nervosa typically arises in adolescence, with a peak onset at 18 years of age. Core features of the disorder include repeated episodes of binge eating accompanied by a sense of loss of control, guilt, and remorse. There is an intense fear of fatness and purposeful attempts to control weight through dieting and/or compensatory behaviors such as self-induced vomiting, excessive exercise, or abuse of laxatives, diuretics, diet pills. About a quarter of individuals with bulimia nervosa, report a previous history of anorexia nervosa. There are relatively few medical complications associated with bulimia nervosa. Dental and periodontal disease is common, due to binge eating and purging, and may require extensive treatment. Some 3% of individuals with the illness have low potassium levels that require remediation. Other uncommon problems include esophageal bleeding due to purging and, very rarely, gastric dilatation or rupture.

Anorexia Nervosa
Anorexia nervosa is an eating disorder that is diagnosed when an individual displays a body weight significantly below what is normal or expected for the individual's current age and height. The individual is preoccupied with self-image and appears to be in denial regarding the severity of weight loss. The individual presents with distorted perceptions regarding his or her body (distorted body image). The individual believes he or she has “fat thighs” or a “fat stomach” when he or she actually lacks appropriate body mass, meaning that the individual is too thin. The extreme weight loss in anorexia nervosa is due to the individual’s fear of gaining weight. The body mass index (BMI) is used to indicate the severity of the disorder with ranges from mild to extremely severe. The two subtype patterns of anorexia nervosa; one is restricting food intake, while the other is bingeing and purging. The subtypes involve patterns of food restriction, and patterns of bingeing, that is, eating followed by purging through vomiting and/or use of laxatives. The binge eating/purging subtype can be distinguished from bulimia nervosa. While both engage in binge eating and purging, the bulimia nervosa maintains body weight that is minimally normal or above normal level. The causes and course of this disorder are many and complex. Anorexia nervosa runs in families and it takes a considerable toll on health requiring both medical and dental examinations to determine the level of biological treatment required. In addition, there are often significant neurological ramifications especially to an extended practice of anorexia nervosa. Social aspects of this disease involve consideration of the family dynamics and the role played by the anorexic individual in the family. Within this social context the anorexic develops psychological beliefs about perfectionism or the desire to remain a child. These beliefs are reflected in the everyday behavior which focuses on excessive food restriction and preoccupations with one’s body image while largely ignoring other areas of life such as in school, work, or school, and friendships. While anorexic individuals may initially be able to function adequately in school or work, cognitive performance deteriorates over time as a result of the disorder.

Mental Health
The distinction between physical and mental health assessment is ultimately an arbitrary one; not only are people with mental health problems at increased risk of poor physical health but people with physical health problems are also more likely to develop a psychiatric illness. This is reflected in the title of the government's mental health strategy document 'No Health without Mental Health', which calls for so-called parity of esteem between mental and physical health and an end to the stigmatization and healthcare inequalities that have long dogged those experiencing psychiatric illness. It is therefore essential that healthcare professionals from all disciplines can competently assess people with mental health problems; indeed, there is a growing body of evidence that the prognosis for people with mental health problems can be improved dramatically by offering them timely assessments and guiding them towards appropriate evidence-based interventions. For youth at vulnerable developmental stages, budding psychiatric problems can be exacerbated by involvement in bullying and substance use. This then places clinically obese adolescents, who have been shown to have greater prevalence of externalizing behaviors and difficulties that were more frequently endorsed by bullying perpetrators. For a young person with a developing psychiatric illness, ‘frequent bullying of others during high-school years increases the risk for later depression and suicidality above and beyond the other established risk factors of suicide’. Externalizing behavior, especially bullying, is a significant correlate of depression and suicidality. The complexity of the connection between bullying and psychiatric symptoms, particularly suicidality, underlies the importance of early psychological and programmatic intervention. Children who are victimized in the early teenage years may be at greater risk for developing psychiatric problems later in life. Bullying has been associated with later reports of psychotic symptoms, paranoia, and bulimia nervosa in later years. Victimization by peers is strongly associated with youth reports of psychotic symptoms, which contributed to an increased risk of developing a psychotic illness later in life. Male victims were more depressed in later years, and male bully-victims were more likely to develop antisocial characteristics and anxiety disorders. Adolescent bullies were more likely to drink alcohol, be involved in physical fights, and demonstrate criminal behavior. Bullies, bully-victims, and victims were also more likely than their uninvolved peers to develop psychosomatic symptoms such as abdominal pain, backache, headache, impaired appetite, and bed-wetting. Substance use in adolescents is also associated with well-documented risk factors such as peer group pressure and low self-esteem, so for a subgroup struggling with weight problems who are desperate to fit in, cannabis use may provide both a way to be accepted by a critical peer group and a means of self-medication against emotional problems. Cannabis initiation, as opposed to tobacco or alcohol, has also been shown to be significantly more prevalent among adolescents who are experiencing symptoms of depression prior to substance use. This then places clinically obese adolescents, who have been shown to have higher rates of depressive symptomatology than non-clinical obese adolescents, at high risk of initiating a pattern of use that is then continued into adulthood. Neurobiological explanations have also been put forward to explain the increased use of marijuana in certain at risk populations and these theories may contribute to the increased drug usage seen in our bariatric population. Problems with impulsivity have been observed both in
individuals with addictions (cocaine, marijuana, alcohol) as well as in individuals with Bulimia Nervosa, Binge Eating Disorder and those who eat in response to negative affect. These patterns of disordered eating are more prevalent among overweight and obese persons than among those of normal weight and may represent a problem with impulse control that predisposes to increased substance use. Interestingly, both pathological eating and drug addiction have been linked by a common attribution to aberrations in serotonin.

**Conclusion**

Bulimia nervosa is a real disease and people who suffer from it usually cannot control it willingly without professional help. Warnings from family and friends to stop such behavior are useless and have the opposite effect. An aggravating circumstance is that patients in the worst stages of their disease receive positive comments from the environment based on appearance or self-control, which they perceive as motivation to continue with destructive behavior. Bulimia belongs to the group of obsessive-compulsive mental disorders, so people who suffer from this disease are prone to order, task execution, discipline and goal orientation. Compulsive overeating most often occurs in secret and often the environment does not even know about it. Therefore, in the eyes of the environment, a person may look like someone who is extremely careful about their diet, but eats enough and pays attention to their physical fitness and does not seem like a person who has a disorder. People with bulimia often feel that their parents do not care enough for them or do not give them enough love. Also, they enter into new relationships very quickly and intensively and have a pronounced fear of leaving. In 30-50% of cases, people with bulimia also have borderline personality disorder. As with anorexia, bulimics often say they hear voices in their head telling them to behave in a certain way or do certain things. With all aspects of the disease: fasting, overeating, purgative and non-purgative discharge, depression, anxiety, suicidal thoughts, voices in the head, there is a very strong sense of shame which makes it extremely difficult to share with anyone exactly what it is and when it is the topic touches with the person should be talked to with maximum compassion and give him a sense of support and security.

**References**