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Leading article

Bulimia nervosa and a stepped care approach to management

Bulimia nervosa is a common psychiatric disorder which may present to a variety of specialists including the gastroenterologist. Often the disorder goes unrecognised for some considerable time, in part because these patients have difficulty in admitting to the problem. This paper describes the disorder, discusses the issue of detection from the perspective of the gastroenterologist, and outlines a 'stepped care' approach to management.

It is only 11 years since the first formal description of bulimia nervosa was published.[1] In this seminal paper Russell drew attention to 'an ominous variant of anorexia nervosa,' a disorder which closely resembled anorexia nervosa except that body weight was in most cases within the normal range. Since then there has been intense clinical and research interest in bulimia nervosa, stimulated by the large number of patients presenting for treatment. From epidemiological studies it is clear that bulimia nervosa is more common than anorexia nervosa, with a prevalence among young women in the region of 1%.[2] The disorder is uncommon in men. It is as yet uncertain how best to provide treatment for the many women who have this condition, a stepped care approach being one solution.

Three features are required to make the diagnosis of bulimia nervosa. The first is loss of control over eating associated with recurrent episodes of overeating (bulimia). These episodes (often referred to as binges) mostly occur in secret and are a source of shame and self disgust. The food eaten typically consists of energy-rich items which the patients are trying to exclude from their diet, the total calorie intake being of the order of 3500 to 5000 kcals.[3–5] Some patients eat larger amounts and there have been several reports of acute gastric dilatation and rupture.[6–9] The frequency of bulimic episodes varies greatly: they may occur many times each day or they may be only occasional. Between the episodes of bulimia most, but not all, patients do their best to restrict their food intake.

The second diagnostic feature is extreme behaviour intended to control shape and weight. The behaviour patterns include self induced vomiting, severe dieting, the misuse of purgatives or diuretics, and, in a minority of patients, vigorous exercise. Often these patterns of behaviour occur in combination and, like the overeating, their frequency varies.

The third diagnostic feature is a characteristic set of attitudes to shape and weight, which resemble those in anorexia nervosa. These attitudes have been described as a morbid fear of becoming fat[1] or, more recently, as a persistent overconcern with shape and weight.[10] The essence of this core psychopathology (as it has been termed) is that the patients judge their self worth largely, or even exclusively, in terms of their appearance or weight.[11] As a result they do their utmost to avoid weight gain or fatness, and some strive to be thin. Most features of bulimia nervosa are secondary to these attitudes.[12]

In addition to these three features which define the disorder many others may be present, the most common being depressive and anxiety symptoms.[13] The patients' social function is usually impaired, and there is a subgroup of patients who have other associated problems – for example, the abuse of alcohol or drugs.[14]

The physical features of bulimia nervosa are variable. Few abnormalities are present on examination, and body weight is usually within the normal range. In a small proportion of cases there is pronounced hypertrophy of the salivary glands, particularly the parotids.[15–17] This swelling is usually bilateral and painless. Its pathophysiology is unclear. Patients who have vomited frequently for some years have erosions of the dental enamel, especially of the lingual, palatal, and posterior occlusal surfaces of the teeth.[18–21] This is especially prominent on the inner surface of the upper teeth. In these areas fillings tend to be proud of the surface of the enamel. If patients have repeatedly used their fingers to stimulate the gag reflex they may have a characteristic distribution of calluses on the dorsum of the hand (Russell's sign).[1]

In about half the patients there is electrolyte disturbance, the most common abnormalities being hypochloraemia, hypokalaemia, hyponatraemia, and a raised bicarbonate concentration.[22] Very occasionally these abnormalities are life threatening. The electrolyte disturbance is a consequence of self induced vomiting and the misuse of purgatives or diuretics, and its nature depends on which behaviour predominates. Raised serum amylase levels are found occasionally,[23–26] which are caused by an increase in the salivary isoenzyme. There have been two studies of gastric emptying. In one, more than half the patients had delayed emptying,[27] but in the other gastric emptying was normal.[28] Studies of taste,[29 30] satiety,[31 32] and cholecystokinin secretion[33] have detected abnormalities, but these have yet to be replicated and their importance is uncertain. They are probably secondary effects of the disorder, although they may perpetuate it. The endocrine state of these patients has not been extensively studied. Some changes are secondary to 'starvation.'[34 35] Menstrual irregularities are common, even among those patients whose weight is in the normal range,[13 36–38] but in most cases regular menstruation returns once healthy eating habits have been restored.[39] With the exception of severe electrolyte disturbance, the physical abnormalities associated with bulimia nervosa rarely merit treatment in their own right.

The aetiology of bulimia nervosa is poorly understood. It often starts as normal adolescent dieting, which becomes progressively more extreme. As a result body weight falls, and in one third to one half of cases diagnostic criteria for anorexia nervosa are eventually met. Then, control over eating breaks down and the extreme dieting becomes punctuated by episodes of overeating. Vomiting, purgatives, and diuretics may be used in an attempt to minimise the effect on weight of the overeating, but eating habits worsen and the lost weight is regained. Gradually the eating disorder becomes entrenched and, after a variable length of time, treatment may be sought. Typically patients are in their mid-20s by the time they present for help.

While it is becoming commoner for patients with bulimia nervosa to seek treatment for their eating disorder, this is often still only after many years' delay. In the intervening period they may present to general practitioners with a variety of symptoms and be referred on for specialist help. Psychiatrists may be asked to advise on depressive and anxiety symptoms, gynaecologists may be consulted about menstrual irregularities, and gastroenterologists may be

consulted on account of gastrointestinal symptoms. In each instance the eating disorder may go undisclosed and unrecognised.

In view of the prevalence of bulimia nervosa it is appropriate for doctors to maintain a high index of suspicion of bulimia nervosa when apparently healthy young women of normal weight present with unexplained symptoms. Patients presenting to gastroenterology clinics may describe abdominal fullness or pain or feelings of being bloated, or they may complain of facial swelling. Most do not mention either the overeating or self induced vomiting, and it is also uncommon for them to complain of laxative induced diarrhoea. In our experience, however, some patients complain of recurrent episodes of spontaneous vomiting.

Detection is possible by asking patients in a sensitive manner about their eating habits, and in particular about their control over eating. It is important to emphasise that these women are deeply ashamed of their behaviour and may find it difficult to divulge the problem in a busy outpatient clinic. Physical signs or laboratory abnormalities rarely help the diagnosis.

Two forms of treatment have received particular attention. A series of controlled trials has shown that antidepressant drugs are more effective than placebo in reducing the frequency of overeating and the intensity of some of the other features of the disorder.[40-42] There is no evidence, however, that they affect the patients' disturbed attitudes to shape and weight or their extreme attempts to diet.[43 44] This may explain why there is a tendency for the disorder to relapse even if these drugs are continued.[45]

The main alternative approach is a specific short term psychological treatment, a form of cognitive behaviour therapy. This treatment is designed not just to change the eating habits of these patients but also to modify their disturbed attitudes to shape and weight.[46] It has been evaluated in a series of controlled trials, and the immediate effects of treatment compare favourably with those obtained with antidepressant drugs.[47 48] Significantly, the changes are maintained for at least the first year after treatment. This treatment, however, his two limitations: firstly, it is time consuming, requiring about 20 treatment sessions over five months; and secondly, it requires specialist training. Simpler forms of treatment are needed. Less intensive treatment has been advocated including various forms of group therapy and dietary advice,[49] and the use of self help manuals.[50] None of these approaches has been subjected to rigorous evaluation, but it seems likely that at least some patients will respond to simpler interventions of this type.

Since it is not yet possible to predict which patients will respond to which form of treatment, it seems sensible to adopt a 'stepped care' approach. At least five 'levels' of intervention can be envisaged. The first level is some form of self help using written material. The second is dietary education and advice, perhaps provided in a group setting. The third is antidepressant drug treatment in combination with advice and support, the drug of choice being either desipramine or fluoxetine, since both have been extensively used in these patients and are well tolerated. The fourth is outpatient psychological treatment on an individual basis, with cognitive behaviour therapy being the approach of choice. The final level is a period of day patient or inpatient care, and subsequent outpatient treatment.

Until a stepped care approach of this type is of proven value, how should these patients be managed? Undoubtedly the initial goal should be to help patients admit to the problem. Disclosing what has been a guilt ridden secret for many years is a major advance, and one which will give the clinician the opportunity to educate and advise the patient. Thereafter, for cases in which the disorder does not seem unduly entrenched or complex, some of the simpler behavioural strategies contained in the established cognitive behavioural treatment might be used.[42 51] In theory this should be possible in an outpatient clinic. Alternatively, referral to a dietitian might be considered, although many dietitians are often not well trained to deal with disorders of this type. In longstanding cases and those in which other problems are present the patient should be referred to a psychiatrist or clinical psychologist, preferably with a special interest in the treatment of eating disorders.

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