Eating disorders
management in general practice

Patients with the more subtle eating disorders, such as the 'eating disorder not otherwise specified' group, can be managed in the general practice setting, particularly if the GP has an interest in psychology. Shared care may be appropriate for the more extreme disorders anorexia nervosa and bulimia nervosa.

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Eating disorders are best viewed as occurring on a wide spectrum ranging from disordered eating, through eating disorder not otherwise specified (EDNOS; which is better considered as a sub-threshold eating disorder) and bulimia nervosa, to the more serious condition of anorexia nervosa. While these diseases occur more commonly in women than in men, the GP should be vigilant that such diseases do occur in males. The lifetime prevalence of anorexia nervosa is 0.2 to 0.5% of women, whereas that of bulimia nervosa is closer to 1%. Anorexia nervosa occurs most frequently in the 10 to 19-year-old age group, patients presenting to general practice at a rate of about 34 per 100,000, and bulimia nervosa occurs most frequently in the 20 to 39-year-old age group, with a presentation to general practice rate of about 57 per 100,000.[1] The seriousness of anorexia nervosa and bulimia nervosa is often underestimated: anorexia nervosa has a higher mortality rate than any other psychiatric condition and a suicide rate higher than that of major depression.

Clinical research has indicated that a substantial proportion (33 to 61%) of patients presenting for treatment of eating disorders do not meet full criteria for either anorexia nervosa or bulimia nervosa and would be considered to have EDNOS.[2] This has resulted in a 'transdiagnostic' approach to therapy for the eating disorders. Such an approach involves cognitive behavioural techniques as well as the addressing of core issues such as self-esteem, perfectionism, interpersonal difficulties and emotion regulation.[3]

This article discusses the eating disorders from a general practice perspective. Early intervention is linked to more favourable outcomes and GPs are well placed to diagnose patients with the more subtle eating disorders, before bulimia nervosa or anorexia nervosa become established. There are more similarities than differences in the psychological, behavioural, physical and treatment issues of the eating disorders, and the more extreme disorders anorexia nervosa and bulimia nervosa are discussed to illustrate these.

IN SUMMARY

- **Psychological treatments continue to be the intervention of choice in patients with eating disorders.**
- **GPs should be aware of the refeeding syndrome.**
- **Many patients with eating disorders can be managed by their GP.**
- **More complex cases may need shared care with a specialist clinical psychologist or psychiatrist.**
- **There is now considerable research evidence as to the medical management of patients with eating disorders.**

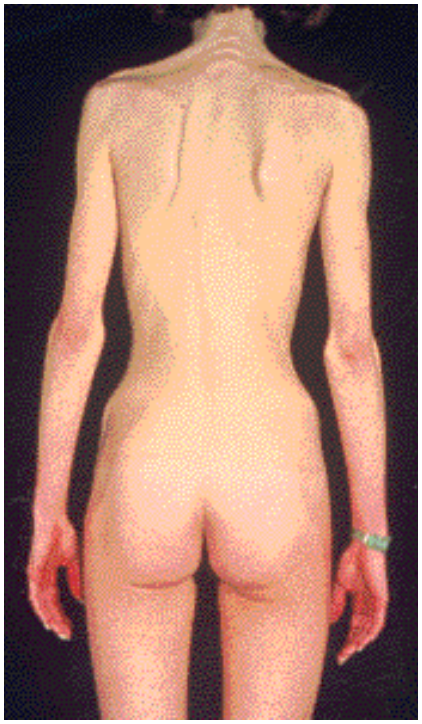

Figure. Severe emaciation in a patient with anorexia nervosa.

Presentation of anorexia nervosa and bulimia nervosa

Anorexia nervosa is characterised by weight loss caused by restriction of food, fluids or both, and/or by overexercise (or persistent restlessness when emaciated). Patients with anorexia nervosa have a body mass index (BMI) of less than 17.5 kg/m^2. Some patients with anorexia nervosa also use vomiting, laxatives or diuretics as a means of weight control (the purging subtype, as opposed to the restricting subtype). Patients have a fear of any weight gain and typically present with a distorted body image. They also often present with comorbid mood disorders (40% of cases) and anxiety disorders, particularly obsessive compulsive disorder (30% of cases).

Patients with bulimia nervosa are, in contrast to those with anorexia nervosa, of normal weight. They may, however, have a history of large weight fluctuations with little overall weight loss. Patients with this eating disorder engage in binge eating (bulimia), whereby they eat an excessive amount of food in a discrete period of time and feel out of control while doing so. Binge eating is triggered by rigid dietary restraint or used as a means to avoid strong negative emotions, or both. Patients who binge eat typically attempt to control their weight by self-induced vomiting, laxative or diuretic abuse or enema use (the purging subtype of bulimia nervosa), or by excessive exercise or rigid dieting (the nonpurging subtype). Bulimia nervosa patients frequently present with a comorbid mood disorder (68% of cases) and impulsive conditions such as drug and/or alcohol abuse (39% and 32%, respectively). Post-traumatic stress disorder is another common comorbid diagnosis seen in such patients (30%).

In both anorexia nervosa and bulimia nervosa patients, self-esteem is unduly influenced by weight and body shape. This is a key psychological aspect of the conditions, and it must be addressed if there is to be a resolution of the behavioural symptoms.

Behavioural characteristics

Dietary restriction

Both anorexia nervosa and bulimia nervosa patients engage in dietary restriction, ranging from the eating of only small portions of food, through the elimination of certain food types (usually dairy or all fats) to not eating at all.

Patients become increasingly preoccupied with thoughts of food, body weight and body shape. They may be obsessed with cooking and feeding other members of the family. Their eating behaviour often becomes more obsessional; for example, food may be cut into small pieces and then eaten very slowly or different foods may not be allowed to touch on the plate.

Purging

Anorexia nervosa and bulimia nervosa patients may self-induce vomiting or abuse laxatives or diuretics to prevent weight gain. This may follow episodes of bingeing (see below) or the ingestion of even a small or normal amount of food, such as a chocolate bar.

Overexercise

Many patients overexercise to expend kilojoules to induce weight loss or prevent its gain. The activity may be surreptitious (for example, going up and down stairs repeatedly when unobserved) or overt (doing multiple classes at the gym). Exercise tends to be solitary and obsessive, and patients become distressed if they are prevented from exercising and often continue to exercise despite physical injury causing significant pain.

Binge eating

Binge eating is defined as the consumption of an objectively large amount of food in a short period of time and a feeling of being out of control while eating.

All patients with bulimia nervosa, by definition, binge eat. Some patients with anorexia nervosa do binge eat, but most consider any reasonable amount of food as a binge. While patients with anorexia nervosa will feel out of control when eating, they do not typically eat an objectively large amount of food; this type of binge eating is referred to as 'subjective' binge eating.

Psychological characteristics

Both anorexia nervosa and bulimia nervosa patients are intensely preoccupied with their weight and body shape and a drive for thinness. Weight and shape are over-represented in the individual sense of self-worth. Onto this core concern are imposed other psychological symptoms, many of which are secondary to semi-starvation. These symptoms include:

- depressed mood
- irritability
- social withdrawal
- loss of libido
- preoccupation with food

- obsessional behaviour
- reduced alertness
- poor concentration.

Diagnosing eating disorders

Making a diagnosis with a patient who is severely emaciated is relatively easy (Figure). However, there may not be any clear presenting symptom for patients suffering from bulimia nervosa or EDNOS. GPs should consider a diagnosis of an eating disorder if patients present with:

- a BMI below the normal weight range (that is, below 20 kg/m^2)
- gynaecological complaints, particularly amenorrhoea or irregular menses
- gastrointestinal problems such as nausea, unexplained vomiting, constipation or food allergies
- chest pain
- psychological symptoms such as depressed mood, low self-esteem, anxiety or insomnia
- an unnecessary concern with weight or shape, particularly manifested in a request for laxatives or diet pills. A diminished ability to exercise presents late in anorexia nervosa and indicates the need for admission to hospital for refeeding; however, an increased drive to exercise would more commonly represent what the GP should look for to identify such patients
- dental erosion.

It is worth noting that patients who are diagnosed with an eating disorder will have presented often to their GP for non-specific disordered eating related problems in the five years preceding formal diagnosis. A medical presentation is common in these patients, and the potential presence of an eating disorder should be considered so an early diagnosis can be made.

Management in the general practice setting

Assessment

All patients with an eating disorder require a through investigation. This is particularly so in the case of anorexia nervosa patients, but should not be neglected in the case of bulimia nervosa or EDNOS patients. Height and weight should be measured. If possible, this should be done in underclothes or a gown to ensure the most accurate weight possible is recorded and to allow an accurate visual assessment of the degree of emaciation. Patients have been known to conceal weights or heavy objects in their clothes to artificially increase their weight, and often wear layers of clothing to disguise the extent of their illness. For adolescents, weight and height should be plotted on a percentile chart and Tanner charts used to assess pubertal status. For adults, BMI (weight [kg]/height [m]^2) should be calculated. A typical day's food and fluid intake should be assessed, as some patients significantly reduce fluid intake as well as caloric intake.

A history of chest pain or palpitation, loss of consciousness or seizure, muscle cramping (a sign of magnesium deficiency), weakness, cough, difficulty breathing and medication should be taken. Postural hypotension, low jugular venous pressure, weakness of the proximal muscles, abnormal chest sounds or dullness to percussion, irregularity of heart rate, abdominal tenderness and

The refeeding syndrome

What is it and what are its implications?

The refeeding syndrome – cardiovascular collapse, starvation-induced hypophosphataemia and dangerous fluctuations in potassium, sodium and magnesium levels – can occur during the early stages of refeeding patients with anorexia nervosa as the increased uptake of vitamins and minerals places stress on an already weakened body. The risk of sudden death at this time is increased by:

- deficiencies of potassium, phosphorous and magnesium
- cardiac arrhythmias
- prolonged cardiac repolarisation (QTc intervals longer than 440 ms)
- bacterial infections (anorexia nervosa causes impaired response to bacterial infections)
- blood glucose less than 2.5 mmol/L
- renal failure
- episodes of unconsciousness.

It is important to note that a low blood glucose level can cause death in the early phase of refeeding in anorexia nervosa patients. At this stage of refeeding, hypoglycaemia can occur an hour or two after meals. The reason for this is that the increased insulin secretion accompanying an increase in the amount of food eaten causes a drop in blood glucose that cannot be corrected by the normal mechanism of glucose release from the liver because anorexic patients have no glycogen in their livers.

How is it treated?

Treatment of patients with refeeding syndrome comprises:

- bed rest
- correction of hydration status
- multivitamin supplements
- thiamine (for example, 100 mg daily for five days)
- sodium phosphate (for example, 550 mg three times daily for 21 days)
- zinc gluconate (for example, 100 to 200 mg daily for two months)
- potassium chloride (for example, 24 mEq three times daily for 21 days).

decreased level of consciousness should be looked for. Laboratory investigations should include complete blood count, levels of serum electrolytes, creatinine, blood urea nitrogen, magnesium, phosphorus, aspartate aminotransferase, alkaline phosphatase and creatine phosphokinase, and urinalysis and 12-lead electrocardiogram.[4] A baseline measure of bone mineral density is recommended to look for osteoporosis, although there is no consensus regarding the specific approach regarding osteopenia or osteoporosis. Referral to an endocrinologist is recommended.[5] In addition, serum ferritin, vitamin B_{12}, red blood cell folate and zinc levels should be measured about once every two years.

The medical complications of undernutrition and the risk of suicide should be assessed.

Medical features of the eating disorders are best conceptualised as manifestations rather than complications of the illness.[6,7] Most medical complications of the eating disorders normalise with the resumption of adequate nutrition and, where required, weight gain. This underscores the importance of normalising caloric intake as a basis for recovery from an eating disorder.

Refeeding

When refeeding, food should be introduced in a cautious manner, starting with about 600 to 800 kcal per day and increasing by 300 kcal every third day. However, if the refeeding syndrome develops (see the box on page 31), nutrient intake should be reduced or ceased.[8] The expectations in refeeding are initially to stop weight loss and then to regain weight consistently at a rate of about 500 g a week.

Pharmacological management

A review of the pharmacological management of anorexia nervosa has recently been published as part of the Australian and New Zealand clinical practice guidelines for the treatment of this disorder.[5] There is little evidence that supports the use of antidepressant or antipsychotic medications to enhance weight gain in anorexia nervosa, although there is a suggestion that an antidepressant may help prevent weight relapse.

There is, however, some evidence to support the use of antidepressants in the treatment of bulimia nervosa. Most antidepressants have been shown to be more effective than a pill placebo for reducing bingeing and purging, and different classes of antidepressants have been shown to be equally effective. However, evidence suggests that a psychological treatment, cognitive behavioural therapy

(CBT), is superior to treatment with antidepressants, and that a combination of CBT and antidepressant medication is more effective than the medication alone. Also, the combination may be more effective than CBT alone in reducing comorbid anxiety and depressive symptomology.

Developments in pharmacological treatments

There have been several enthusiastic reports of the efficacy of olanzapine (Zyprexa) with respect to weight gain, reducing hyperactivity and reducing eating disorder ruminations. A starting dose of 2.5 mg a day is recommended. Most patients require a dosage of between 2.5 and 7.5 mg per day. We have found that as patients approach normal weight there is a tendency for those taking olanzapine to continue to gain weight rather than for the rate of weight gain to plateau. Therefore, we typically discontinue olanzapine when the patient reaches a BMI of 19 or 20 kg/m^2. Some patients report extrapyramidal side effects. We recently conducted a clinical trial of olanzapine in the treatment of cognitions in anorexia nervosa, but further randomised controlled trials are urgently needed.[9]

Zinc (as zinc gluconate [Organic Zinc], 1 tablet [115.5 mg; equivalent to Zn 15 mg] a day for two months) increases the rate of weight gain, irrespective of serum zinc status. This may be due to the effect of zinc on neurotransmitters in the amygdala.[5]

Psychological management

Some guidelines are given below for GPs interested in managing eating disorder patients who are not yet severely emaciated. In the case of bulimia nervosa patients, there is some evidence to suggest that a reasonable initial treatment is the use of a self-help manual, with input from the GP.[10]

Other practitioners may choose to care for patients with an eating disorder in conjunction with a specialist psychiatrist, clinical psychologist or dietitian.

Engaging the patient in therapy

It is important to remember that most patients with eating disorders, and particularly those with anorexia nervosa, are markedly ambivalent about treatment. It is best to acknowledge this upfront with patients. Asking questions such as 'How do you feel about coming here today?' or 'What do you feel the difficulty is for you?' validates that not all patients feel they have a problem and that there is ambivalence about treatment. Another way to help engage patients is to discuss not only the reasons to change but also the reasons that change is a fearful proposition. This

indicates that you recognise that an eating disorder is not simply a 'diet gone wrong' but serves a psychological purpose in that particular patient's life.

Counselling 'microskills' such as validation, accurate empathy and reflective listening are all essential skills in the management of patients with these conditions. It is prudent to place the eating difficulties in the context of the patient's world. This is best framed as an attempt to cope with whatever issues the patient is struggling with at the time, or at least as an attempt to make the patient feel better. Acknowledging this in an empathic way is an important step in decreasing the reluctance for treatment often demonstrated by these patients. A good general description of the clinician's attitude is empathic and friendly yet also seriously concerned about the implications of continuing with the current behaviour.

Ongoing sessions

Adequate time should be allowed for each of the several consultations that will be needed when managing patients with eating disorders. These sessions should concentrate on assessing patients' eating patterns and gathering accounts of all food and fluid consumed.

Patients should be taught psychological skills such as those encompassed by motivational enhancement and CBT to help them cope with beginning to eat again. Patients who are bingeing will need to be educated about the relation between dietary restraint and binge eating.

Family involvement

When dealing with patients living at home, a family interview should be arranged. Preferably this should include everyone who lives in the household with the patient. Family members will usually be appropriately concerned and will want to do what is best for the sufferer. It is likely that parents will feel guilty that it is their fault that their child has become sick. Remind them that all families do their best and that feeling guilty is a profitless emotion.

The family should be taught to distinguish between the patient and the illness – that is, the illness should be externalised. Most families will present as dysfunctional to some extent, but it should be assumed that this dysfunction is a result of having a seriously ill family member rather than being the cause of the eating disorder.

Family interventions are often best seen as supporting the parents in managing the illness, as exemplified by the Maudsley approach to treatment, rather than as 'family therapy' in the more traditional sense.[11] (The Maudsley approach focuses on behavioural change around eating and weight gain rather than on the causes of the anorexia nervosa, and emphasises the importance of the parents' involvement in achieving this.)

Referral to a specialist

The decision to refer to a specialist practitioner or clinic will depend on the GP's level of competency in dealing with an illness with a psychological component, the availability of training and support, the severity of the particular case and the availability of appropriate specialist services.

Up to date information regarding specialist services is available through the various consumer organisations for eating disorders in each State (see the links page on the Eating Disorders Foundation's website, www.edsn.asn.au). These organisations also provide information on eating disorders for sufferers, carers and GPs.

Conclusion

GPs are well placed to recognise patients with the early stages of an eating disorder, and are able to manage and co-ordinate treatment for most of these patients.

Although anorexia nervosa is a serious and potentially life threatening condition with prolonged psychosocial dysfunction and physical morbidity, hope should never be lost because half of the patients eventually make a full recovery. MT

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DECLARATION OF INTEREST: None.

QUESTIONS FOR CPD ARTICLE THREE CPD: 1 POINT

CPD Q.

ARTICLE 3: Eating disorders – management in general practice

Instructions

1. Before you fill out the computer answer form, mark your answers in the box on this page. This provides you with your own record.
2. The answer form is bound under the back cover of the journal. Tear it out carefully.
3. Please read the instructions on the answer form. It is very important that you follow them carefully.
4. Your answers for the October issue must reach Medicine Today by 30 November 2005.
5. You must score at least 75% in order to be awarded the assigned CPD points.

Answer true or false to parts (a) to (e) of the following questions.

Part 1. Brittany is a 17-year-old girl whose mother is concerned about her mood swings. You speak to Brittany alone. It is true that the following symptoms or signs should raise the possibility of an eating disorder:

a. Dental erosion.
b. Weight loss.
c. Irregular menses.
d. Mood swings.
e. A request for aperients.

Part 2. During the consultation, you decide to weigh Brittany – who from across the desk appears to be within the normal weight range. She says OK, but points out that she is quite huge. Regarding weighing Brittany:

a. It would be routine to not undress her, so as to maintain her sense of comfort.
b. Brittany's reaction to being weighed may reflect an unhealthy attitude towards her weight.
c. To correctly assess her body mass index (BMI), you will need to measure Brittany's height.
d. A BMI of 19 kg/m^2 would be diagnostic of anorexia nervosa.
e. If Brittany's BMI is below 20 kg/m^2 it would be reasonable to organise some blood biochemistry.

Part 3. Are the following statements true or false of anorexia nervosa?

a. It is more common than bulimia nervosa.
b. Anorexia nervosa has a higher mortality rate than schizophrenia.
c. Anorexia nervosa has a higher suicide rate than major depression.
d. Fewer than one-third of cases are found to have a mood disorder.
e. In some subtypes of anorexia nervosa, patients are of normal weight.

Part 4. With respect to eating disorders:

a. Some patients with anorexia nervosa binge eat.
b. In contrast to patients with anorexia nervosa, those with bulimia nervosa seldom present with a comorbid mood disorder.
c. Most patients with an eating disorder will have presented often to their GP for nonspecific disordered eating related problems in the five years preceding formal diagnosis.
d. There is strong evidence that shows the use of antidepressants usually leads to weight gain in patients with anorexia nervosa.
e. Most antidepressants have been shown to be more effective than cognitive behavioural therapy alone in patients with bulimia nervosa.

ALLOCATED CPD: 1 POINT PER ARTICLE
CPD point allocation is not guaranteed and is subject to review by the RACGP.

CPD Article 3

	Part 1	Part 2	Part 3	Part 4
a	T F	T F	T F	T F
b	T F	T F	T F	T F
c	T F	T F	T F	T F
d	T F	T F	T F	T F
e	T F	T F	T F	T F

Check your answers in the December issue of Medicine Today. We will advise you of your point tally every six months.