Eating Disorders

Introduction

In western cultures eating problems ranging from severe morbid obesity to anorexia nervosa have achieved an increasing amount of media interest. Morbid obesity and obesity probably have the most impact on medical health economics, medical problems such as type II diabetes becoming increasingly common in those who are overweight. However, within our society there has also been much debate about the impact on health of very thin supermodels who are considered as role models for growing teenagers. Clearly there are many social and cultural issues which impinge on the subject of eating disorders, however, these lecture notes will be confined to those eating disorders which may present to a psychiatric clinic with a specialist interest in eating disorder.

The eating disorders range from anorexia nervosa where the body mass index (BMI = wtkg/Htm2) < 17.5 to morbid obesity with binge eating where body mass index can range from 31 to over 50. In the middle ground is bulimia nervosa where a normal body rate is maintained (BMI between 20 and 25) where the eating pattern is grossly abnormal with episodes of binge eating compensated by behaviour to prevent weight gain.

Bulimia Nervosa

Clinical Features

Bulimia nervosa is characterised by the following clinical features:

- More than three episodes of binge eating per week (a binge being defined as a large amount of food eaten rapidly with a subjective feeling of loss of control).
- Behaviours to prevent weight gain. Two thirds of bulimics vomit but exercise, laxative abuse and amphetamine abuse are other ways in which weight is commonly controlled.
- Preoccupation with body weight and shape.

Bulimia nervosa is the most common eating disorder and in community studies it has been shown to affect 1 in 50 women. Male suffers are less common with prevalence rates of 1 in 500 being found. The peak age of onset of binge eating which defines the syndrome is at 18. The usual clinical history is of a period of dieting around age 16 to 17, weight is lost and binge eating ensues followed by a compensatory mechanism to prevent weight gain. Characteristically the individual has low self-esteem their worries becoming centred on their body shape and weight. As the syndrome takes hold further lowering of self-esteem occurs secondary to the binge eating and purging behaviours.

Medical Complications

Generally speaking women with bulimia nervosa maintain their weight within a normal range. Medical consequences are secondary to purging behaviours. Self-induced vomiting may cause erosion of dental enamel, oesophagitis and severe electrolyte disturbances. Hypokalaemia is common though cardiac dysrhythmias are relatively unusual. It is thought the chronic hypokalaemia is less likely to cause cardiac dysrhythmias than an acute change in serum potassium. Other physical consequences include irregular menstruation, parotid enlargement and disturbed bowel habit.

Treatment

Studies have shown that for women suffering from bulimia nervosa, who do not have a diagnosis of personality disorder, short term focused psychotherapy is effective. Long term follow up studies have shown both cognitive behavioural psychotherapy and interpersonal psychotherapy either individually or in groups to be effective. As a basis for all these therapies health education with regard to a healthy diet is important plus exploration of the emotional triggers to binge eating. The success rate for treatment is relatively high varying between 60% and 70%.

Where bulimia nervosa is accompanied by symptoms suggestive of borderline personality disorder (multiple deliberate self-harm, rapid mood fluctuations and difficulties in relationships) more intensive long term psychotherapy is required. Often this is only effective within an in-patient setting.

The SSRI fluoxetine has been shown to be effective in reducing frequency of binge eating, when prescribed at a dose of Fluoxetine 60 mg daily. However, though this may result in dramatic improvement in symptoms, symptom recurrence is likely to occur when medication is discontinued therefore fluoxetine should generally be used as an adjunct to psychological treatment.

Anorexia Nervosa

Clinical Features

Although anorexia nervosa probably has more media attention it is much less common than bulimia nervosa, prevalence rates being found to be around 0.5 per 100,000. The incidence, however, in young females particularly those who are ambitious and 'perfectionistic' may be as high as 1 in 250. Anorexia nervosa has a high mortality and morbidity rate, mortality being estimated between 5 and 20%. Recovery is often slow, 50% of patients recovering at 6 years and 70% at 33 years, other patients will following a relapsing remitting course and a significant proportion will die from the disorder.

Characteristic clinical features of anorexia nervosa include:

- Maintenance of a low body weight less than a body mass index of 17.5.
- Amenorrhoea either primary or secondary in females, in males loss of libido.
- A severe fear of fatness and phobia of normal body weight.
- A distorted body image where the individual does not recognise the degree of their emaciation. In particular as weight is gained they misinterpret changes in body weight and shape.

There are many aetiological factors involved in anorexia nervosa these include genetic, social and environmental. There does seem to be a clustering of anorexia nervosa within families in particular identical twins. Other factors in the family that are thought to promote the development of anorexia nervosa include parental discord and a history of childhood sexual abuse.

Medical Complications

On examination of an anorexic their skin, typically, is dry with a covering of soft, downy hair (lanugo). Secondary sexual characteristics are maintained. Examination may also reveal hypothermia, hypotension, bradycardia and/or oedema. The oestrogen deficiency that can occur may result in osteoporosis, and secondary fractures, type II hyperlipoproteinaemia and hypercholesterolaemia.

Starvation and purging in particular may result in hypokalaemia and hypochloraemic alkalosis. As a consequence the severely ill anorexic is prone to arrhythmia's an possible cardiac arrest.

A full blood count may show a microcytic anaemia with a low white count (note that as there may be B12 as well as iron deficiency the anaemia may be normocytic). Endocrine investigations show

- Elevated basal cortisol and loss of diurnal variation.
- Gonadotrophins and gonadal steroids are reduced.
- Thyrotrophin-releasing hormone test is impaired and T3 is low.
- Elevated growth hormone.

The last abnormality is due to carbohydrate restriction, the former three to low body weight.

Treatment

Treatment of anorexia nervosa has to combine both re-feeding and psychological therapies. At very low body weights the capacity of the patient to use psychological treatments is often poor with concrete thinking and sometimes confusional states being evident. In patients developing anorexia under the age of 18 family therapy is found to be effective although its use in older age groups is less clear. In less severely effected patients out-patient or day-patient treatment is of benefit but in those whose body mass index is less than 13 in-patient treatment is frequently required. Most in-patient treatments have a multidisciplinary approach with assessments being carried out by nurses, psychiatrists, psychologists, occupational therapists and dieticians. The treatment combines individual work and group therapy some patients responding to a cognitive behavioural approach, others to a more long term psychodynamic approach.

Binge Eating Disorder

This disorder recently defined in DMS IV describes a group of patients who binge eat at high body weights, i.e. they binge eat but do not indulge in compensatory mechanisms to prevent weight gain. Treatment needs to be long term, the initial treatment entailing a period of weight maintenance with the development of regular eating patterns followed by a very long period of gradual weight loss.