Eating Disorders

Background

Eating disorders are a clustered group characterised by abnormal eating habits and/or attitudes towards body weight and shape.There are three symptom clusters, being behavioural, psychological, and physical. The two most 'known' are **anorexia nervosa** and **bulimia nervosa**, and we also have the group clustered as EDNOS - eating disorders not otherwise specified, which is a bigger group than anorexia and bulimia. EDNOS can be thought of as a catchment of disorders that have not yet reached a criteria-based diagnosis for **anorexia** or **bulimia**. Generally we find these disorders cluster more in the female sex, although they can manifest in males as well (and do so with different symptom pictures). Typical onset is usually in adolescence, and it is important to note that eating disorders have the highest mortality rate of any psychiatric condition, both self-harm and physiological.

Anorexia nervosa is a disorder in which sufferers have extreme weight loss as a result of strict dieting patterns, despite a belief on the part of the sufferer that they are in fact overweight. High element of fear of becoming overweight, or even regular weight, pervade this condition. Diagnosis is criteria based, meeting the following three: *weight-based*, being a BMI below 17.5; *distorted body image* and abnormal attitude to food and weight; *amenorrhoea* and often often other signs of starvation. Estimated incidence is 20 per 100k people per year in women, 10% that in men - although men are more likely to be misdiagnosed/underdiagnosed. There's a 55% concordance in monozygotic twins, and people with low self-esteem or perfectionistic traits are higher-risk.

Bulimia nervosa is an eating disorder characterised by a boom and bust cycle of binge-eating, with recurrent episodes of uncontrolled overeating. Three key features are *preoccupation with body weight/shape*, *repetitive episodes of binge eating* (large amounts, usually within several hours), *counteractive weight control post-binges*, where patients have fear of weight reinforced by binge-patterns and thus compensate through extreme behaviours like self-induced vomiting, laxative or diuretic abuse, fasting, excessive exercise. Up to 2% of women are affected across socioeconomic groups, 10% of patients are male, and only 10% (estimated) will seek medical help. Risks include parental/childhood obesity, critical commentary about weight/body shape, parents with an eating disorder, sexual/physical abuse, and other disruptive family issues - high expectations, low care, parental death or alcoholism, etc.

Clinical Presentation

Anorexia has a defined presentation of deliberate weight loss with food intake restriction, weight below 85% predicted (17.5 BMI), dread of gaining weight and overevaluation of habitus, and amennorhoea of three months or greater duration (exclude COCP patients). Other Sx may include *physical issues* (fatigue, hypothermia, hypotension, bradycardia, oedema, gaunt face, arrhythmia, pubic hair scarcity, delayed secondary sexual characteristics), *psychological* (depression or obsession, preoccupation of food including enjoyment of cooking *for others*) and *behavioural* (social withdrawal, limited interests, enhanced weight loss by exercise/drugs/vomiting). Think of the **SCOFF** questionnaire - do you make yourself **S**ick, do you worry you have lost **C**ontrol over how much you eat, have you lost more than **O**ne stone (~6kg) in three months, do you believe yourself **F**at when others believe you thin, do you believe **F**ood dominates your life.

Bulimia usually has an adolescent onset and must be identified in context. Presentation usually regular binge eating Hx, attempts to counteract binges with weight loss extremes, preoccupation with body shape/weight/image, preoccupation with food/diet (ritualistic), and often psychiatric comorbidities like depression. Ex is often normal and should be aimed at complications like **dehydration** or **dysrhythmias** (hypokalaemia). Think of *Russell's sign* (calloused on the back of hand from repeated induction of vomiting. Consider DDX - binge eating disorder. depression, anorexia with bulimic features.

Investigations

For **anorexia**, consider ESR and TFT to determine if there is a physiological reason for weight loss. Frequent FBC (Hb), urea, electrolytes (K+!), creatinine, glucose, LFT, TFT. For **bulimics** most Ix will be fairly normal apart from serum potassium - which can be scarily low. Renal function and electrolytes should be tested in these patients in view of frequent self-induced vomiting and laxative abuse.
In **eating disorders in general** consider FBC, ESR, UEC, rBGL, CMP, Albumin/protein, LFT/TFT, Amylase, oestradiol (amenorrhoea), FSH, LH, ECG for arrhythmia, DXA for bone mineral density, urine/serum osmolality.

Treatment

Key treatment principles: engage with the process contain the behaviours, and rehabilitate nutritionally if underweight. Outpatient if possible, inpatient if poor progress/complications. Consider schedule if necessary if resistant patient in danger of medical harm/health-related harm.
Anorexia: mild (BMI 17+, no significant co-morbidities) can be managed in a GP setting with support and monitoring, but if within two months there is no response specialist services should be involved. The lower the BMI/greater co-morbidity presence, the more urgent the referral. A variety of talking-therapies like general support, CBT, IPT, anxiety management and motivational therapy have been used. Small dose atypical antipsychotics (?Olanzapine) may help manage anxiety, insomnia, repetitive thoughts in anorexia. Co-morbid depression may require pharmacological Th. **The goal of therapy is reduction of behaviour and consistent weight gain**, consider 0.5-1kg a week inpatient, 0.5kg a week outpatient as a good metric. Regular monitoring and supplements are useful, and risk to self must be carefully managed - consider *schedule*.
Bulimia: majority can be outpatient treated, inpatient Th is more concerned with the suicide risk patients. Consider CBT-BN (modified for bulimia), over 4-5 months. Interpersonal psychotherapy may have a role if CBT is unwanted/non-responded. Pharmacological management can be taken as *adjuvant*, consider an SSRI as a first line (although evidence isn't high) to help reduce binge/purge behaviours.
For **children & adolescents** consider the *Maudsley Family-Based Therapy* method, which focusses on parental responsibility, maximising their judgment with a nonjudgmental therapeutic perspective. Consider separation of the disorder and the patient, to create difference.
As a general rule, *psychotherapy and behavioural change* are the most beneficial, long-term, for treating eating disorders. *Pharmacological* treatment can prove beneficial, as a limited adjunct.

Complications

Metabolic complications are a big issue for both anorexia and bulimia. Death is a big potential - self-harm/suicide is a commonality, death via starvation in anorexia or death via electrolyte/cardiac complications in bulimia. For **anorexia** specifically, worry about hypokalaemia, hypotension, anaemia, cardiac failure, hypoglycaemia, osteoporosis, acute renal failure. For **bulimia** worry also about haematemesis, dental erosion and enlarged salivary glands.
Prognosis: 50% of bulimia patients may recover. Anorexia is more variable, about 40% will fully recover, but there is a long-term 20% mortality rate (suicide and medical complications). Long-term illness prior to medical care incites a poorer prognosis.

References & Readings

Bulimia nervosa & *Anorexia nervosa*, PatientUK. Phase 3.6-7 CBL - Maggie Smith (Readings & Case). *The First Pillar: Adolescent Issues, Substance Abuse*.