

Childhood Eating Disorders for GPs

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Overview

- Classification of Childhood Eating Disorders.
- Case Example.
- Maudsley Family-Based Therapy.
- Epidemiology.
- Take-home messages.

Types of Childhood Eating Disorder

DSM IV: Eating Disorders:

Anorexia nervosa: restricting subtype, binge-eating/purging subtype.

Bulimia nervosa: purging, non-purging subtypes.

DSM IV: Feeding and Eating Disorders of Infancy or Early Childhood:

Pica

Rumination Disorder

Feeding Disorder of Infancy or Early Childhood.

Anorexia Nervosa

DSM IV diagnostic criteria:

- A. Weight loss (<85% of that expected)
- B. Intense fear of gaining weight or becoming fat, even though underweight.
- C. Body image disturbance.
- D. Amenorrhoea (at least 3 menstrual cycles).

Age-adjusted DSM IV criteria for anorexia nervosa in children

Any clinically significant degree of weight loss not due to medical illness in the context of reported excessive dieting and exercise for > 1 month.

- Verbalisation of fear of weight gain is not required.
- Amenorrhoea requirement waived.

Types of Childhood Eating Disorder

- Anorexia Nervosa
- Food Avoidance Emotional Disorder
- Selective Eating
- Restrictive Eating
- Food Refusal
- Functional Dysphagia
- Pervasive Refusal

(Bryant Waugh, 2000)

Ways of Referral for a Case of Anorexia Nervosa

- Usual presentation is of a child brought to a GP by their family with weight loss.
- GP refers to paediatrician (usually) or child psychiatrist.
- Child admitted to Children's Ward for about a month for in-patient re-feeding.

Experience in Dunedin over the last 8 years

- Six cases of anorexia nervosa, all female, aged 10 to 13.
- Four had primary amenorrhoea and two had secondary amenorrhoea.
- All presented life-threateningly unwell with hypotension, bradycardia and hypothermia.
- Four cases prescribed fluoxetine to treat co-morbid major depression (three cases) and one to treat OCD.
- All have made full physical recoveries.

Indications for Admission in Children and Adolescents

Physical:

Rapid weight loss; refusal to eat or drink; feeling faint or collapsing; severe exhaustion; low BMI/ weight < 3rd centile; confusion or slowing of thoughts; pulse < 60; low systolic blood pressure (< 80 mmHg); BP < 80/50 mmHg; orthostatic hypotension; hypothermia (<35.5 degrees Celsius).

Indications for Admission in Children and Adolescents

Physical:

Acetonuria; hypoglycaemia (< 0.6 g/l); electrolyte imbalance (potassium, sodium, phosphate, magnesium); increased creatinine (> 100 micromol/l).

Psychiatric:

Failed out-patient treatment; suicidality; severe family dysfunction.

Case Example - Sarah

- 10 years-3 months-old girl.
- Lives with parents. Only child.
- Referred from Children's ward having been admitted with medical complications of weight loss in April 2010.
- Weight: 24.75kg (less than 3rd centile); height: 133.3cm (just over 10th centile); BMI: 13.9; pulse: 42; BP: 100/50; hypothermic; cold peripheries.
- 4kg weight loss in 3 months, amounting to 17% of body weight.
- Pre-pubertal.

History of Presenting Complaint

- Always concerned about food.
- Increasing food restriction for over 3 months. Making excuses to go to her room to avoid having dessert. Exercising after meals to “burn it off”.
- Severe food restriction over the last month, including fruit and water (eating 40% of expected calories).
- No vomiting.
- Occurred against a background of misery and worry.

HPC

Parents consulted their GP after the Easter school holidays. Sarah was being cared for by her grandmother whilst parents trained for a mountain biking competition. Noticed to be very miserable. She reluctantly disclosed to her father that she was afraid of becoming fat. She asked her father not to tell her mother because “I’m scared of being bigger and mum won’t love me”.

HPC

- Taken to GP by both parents.
- Referred to Paediatric outpatients and was admitted to the ward.
- Referred to CAFMHS.

Food intake prior to admission

- Breakfast: Cereal and milk. Cereal measured carefully with attempts to put some back in the box; gave up chocolate milk.
- Morning tea: jam sandwich.
- Lunch: not eating lunch; screwing up food in anger.
- Afternoon tea: stopped eating a special platter she prepared with her father.
- Dinner: highly stressful; only eating vegetables; trying to dispose of food.
- Marked distress and indecision around eating.
- Smashed all her Easter eggs.
- Pretending to eat food but hiding it e.g. lollies at the cinema.

Body Image Disturbance

- Fear of becoming fat and “big”.
- Expressed concern that her arms and stomach were “too fat” associated with frequent checking in the mirror and pulling her clothes down to hide her body.
- Frequently checking for a double chin and running her palms across her face to feel for her cheekbones.
- Unusual behaviour: scratching and rubbing her teeth.

Exercise

- Marked increase in exercise two months prior to admission because she felt “fat and lazy”.
- Introduced “big walks” for which she was praised.
- Choosing to run when walking would be more appropriate.
- Horse-riding.

Other Features

- Agitated. Low mood. Tearfulness. Threat of self-harm. Expressing guilt at doing things for fun.
- Ruminative preoccupation with food.
- Excessive sensitivity in friendships.
- Frequent seeking of reassurance that she was slimmer than her best friend (who was tall and lean).
- “Meltdowns” about what clothes to wear. Insisted on wearing the same grey top all the time.
- Isolating herself in her room. Told parent she hated them.

Family Eating Pattern

- Health-conscious family who openly labelled food as “healthy” or “rubbish”.
- Mum: weight-loss consultant; teetotal; “anal about healthy-eating”.
- Dessert after dinner as routine.
- Saturday: “rubbish night” - “junk-food and a movie”.
- Never ate takeaways.
- Sarah heard mum coaching clients on the telephone and praising them for weight loss.

Family Exercise

- Parents serious competitors in mountain biking. Regular training and competitions.
- Taking the dog for a walk.

Family History - Mum

- 32 years-old. Weight-loss consultant for 3 years, working 18 hours per week. Well. Sarah's parents met whilst working at a butchery department of a supermarket. De facto couple. Mum born and raised in Dunedin. Her father abandoned the family when she was 8 and she had no further contact with him. Her mother is alcohol dependent. Financially successful brother and sister.
- Menarche: 12 years of age.

Family History - Dad

- 37 years-old. Painter-decorator. Trained as a butcher. Always a “worrier” with episodes of (untreated) depression and anxiety. Appeared depressed at the time of this assessment.
- Born and raised in Dunedin, second of four children.
- His father had OCD.

Family History of Mental Disorder

- Paternal family history of depression: father, uncle, grandmother.
- Paternal grandfather: OCD.
- Maternal grandmother: Alcohol Dependent.
- Mother's cousin's daughter treated for anorexia nervosa aged 12.

Family Relationships

- Close relationship with both parents.
- Parents separated for six months in 2002 (when Sarah was 2) in the context of work and financial stress. In 2000 (when Sarah was five months old) the family moved to Wanaka for eight months, but “lost everything” through a failed business venture and cost of housing.
- Parents differed in their desire to have another child.

Extended Family

- Most support within the nuclear family.
- Visits to maternal cousins in school holidays.
- Occasional contact with maternal grandmother.
- Some contact with paternal extended family.

Personal History

- Unplanned, normal pregnancy. Parents had been in a relationship for five years.
- FTNVD. 6lb 13 oz.
- Unsettled baby with reflux for six months. Parents decided to delay having another child for a long time.
- Bottle-fed.
- Normal developmental milestones.

Medical History

- Eczema.
- Grommets aged 3.
- Alopecia areata aged 3 and 5 ½ , resulting in the loss of 80% of her hair for 18 months.

Schooling

- Casual day care from 5 ½ months of age in Wanaka. Part-time home-based care for a year from 18 months.
- Kindergarten from 2 ½ years.
- Same primary school from 5 years. Able student.
- No separation difficulties but always anxious about school.
- After-school care one day per week.

Current School Functioning

Teacher Report:

- “Does really well academically”.
- Perfectionist; “tries really hard”.
- Self-denigratory if she produces work that is less than perfect.

Peer relationships: “Withdraws and sulks if friends don’t do what she wants, until they come back to her”. Very dependent on her best friend.

Personality/Temperament

- Always an anxious child e.g. when she was 5 she worried that her father would not return from the basement; worries about going to the school hall; worried about being in a fire after fire education at school; worried mum would get lost or hit by a car if she walked the dog alone.
- Perfectionist – made lists, even for play; compliant. Attended Guides. Swimming.
- Wanted to work with animals.

Social Circumstances

- Own home for last 3 years.
- Finances stable.

Mental State Examination

Small, pale, miserable-looking girl, in bed, crying. Felt “confused” because everybody was telling her she was “too skinny”. She wanted reassurance that she was more skinny now than in photos taken a year ago when she thought she looked “big”. Wanting to know how much weight she would need to gain. Attempts to challenge dysfunctional thinking e.g. “what do you like best about your friend?” and attempts to introduce humour

Mental State Examination

No impairment of sleep, energy or concentration. Exploration of other worries. Admitted she used to “worry about a lot of things” but now only worries about her size. Recalled how she used to worry that her ears stuck out and able to acknowledge that worries that seem really big at one time can fade away.

Encouragement: she had already “bossed one worry back so she has some skills to boss the anorexia worries back too ”

Formulation

Sarah is a 10 ¼ year-old pre-pubertal girl with potentially life-threatening weight loss associated with body image disturbance and excessive exercise, developing over about four months, against a background of increased misery, guilt, increased sensitivity to rejection and rigidity of thinking, in the context of a perfectionistic and anxious personality. The disorder has developed in the context of a family culture that values healthy eating and exercise

Formulation

Her deeply-held cognition that “I must be thin in order to be loved” is likely to have been influenced by her mother’s work as a weight-loss consultant. There is a strong family history of mental disorder (depression, OCD, ADS and childhood-onset anorexia nervosa). Despite difficulties in infancy (parental separation and financial problems) she has developed a highly secure attachment to her parents

Formulation

It is likely that the anorexia developed in the context of a major depressive episode. Her strengths are the devotion of her parents and her intelligence. Prognosis will depend on the strength of the parental and marital relationship, their ability to oversee compliance with the meal plan and engage in Family-Based Therapy. Ability to engage in treatment may be reduced due to her father's untreated depression.

Diagnosis

- Axis I: Anorexia nervosa, restricting type
Major depressive disorder,
moderate, single episode
- Axis II: Obsessive-compulsive personality
traits
- Axis III: Hypothermia, bradycardia
- Axis IV: Paternal mental illness; influence of
mother's work
- Axis V: GAF=10

In-Patient Treatment

- In-patient oral re-feeding over our weeks.
- Cardio-respiratory monitoring for two weeks.
- Non-punitive environment. Gains e.g. leave from the ward liked to health and only indirectly to weight gain.
- Two therapists.
- Liaison with in-patient Paediatric team.
- Bed-rest to gradual mobilisation.

In-patient Treatment

- Commencement of fluoxetine to treat depression.
- Psycho-education.
- Externalisation of the illness. Learning to recognise the “anorexia talking” and not engaging with it, but keeping the parent-child relationship positive.

Discharge from the Ward

- After “successful” weekend leave.
- Discharge weight: 26.6kg (1.85kg weight gain); BMI: 15.
- Follow-up with CAFMHS weekly and with the dietician 3-4 weekly.
- Graded return to school and exercise.
- “Body in recovery”.
- “Stages of recovery”.

Stages of Recovery

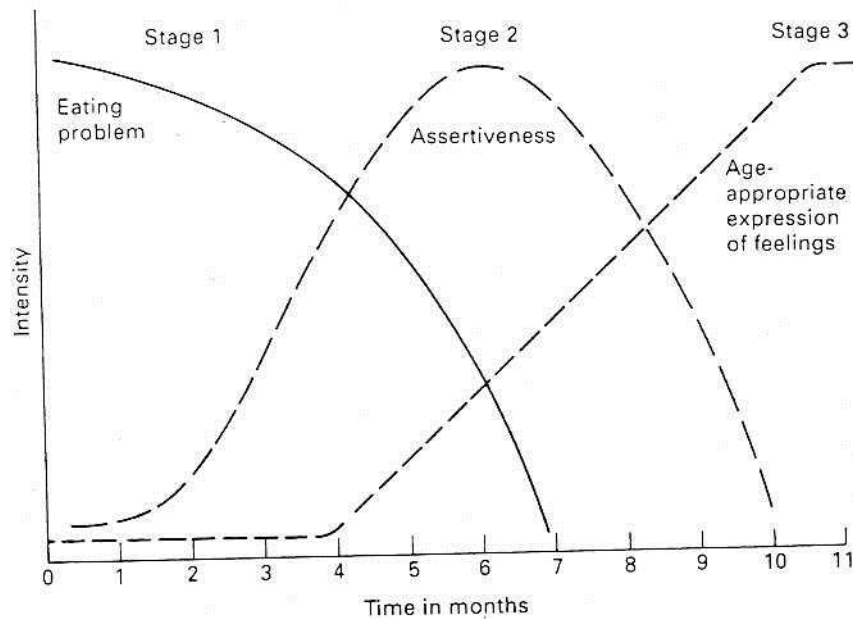
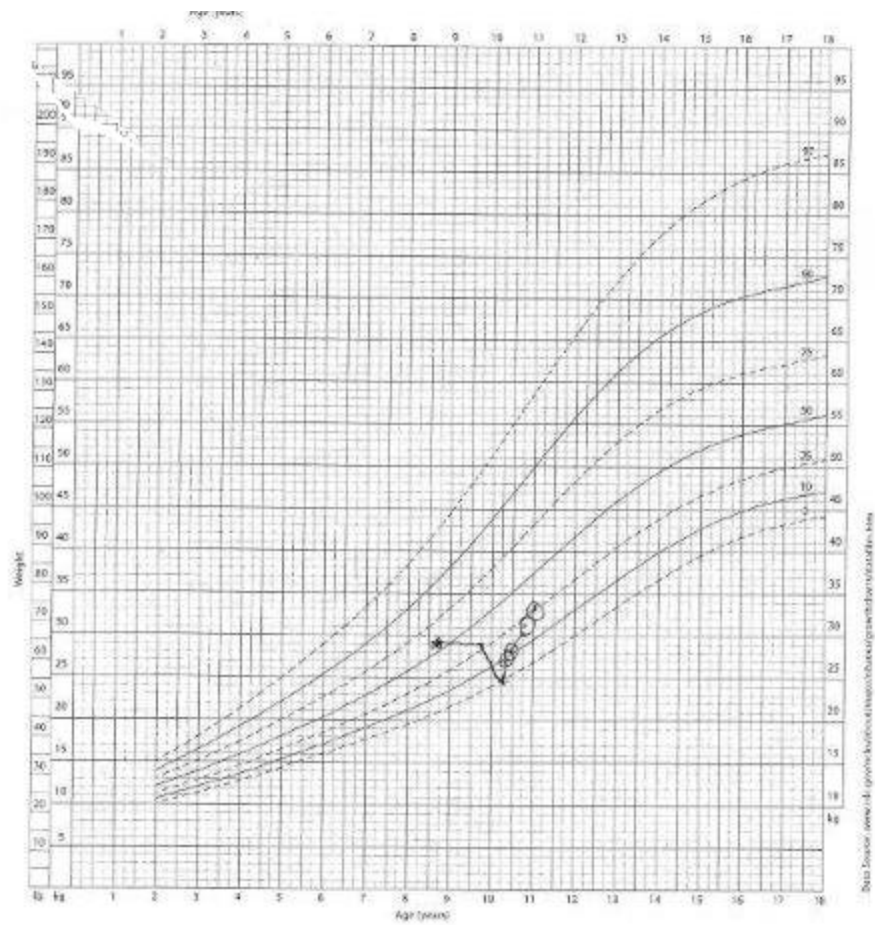
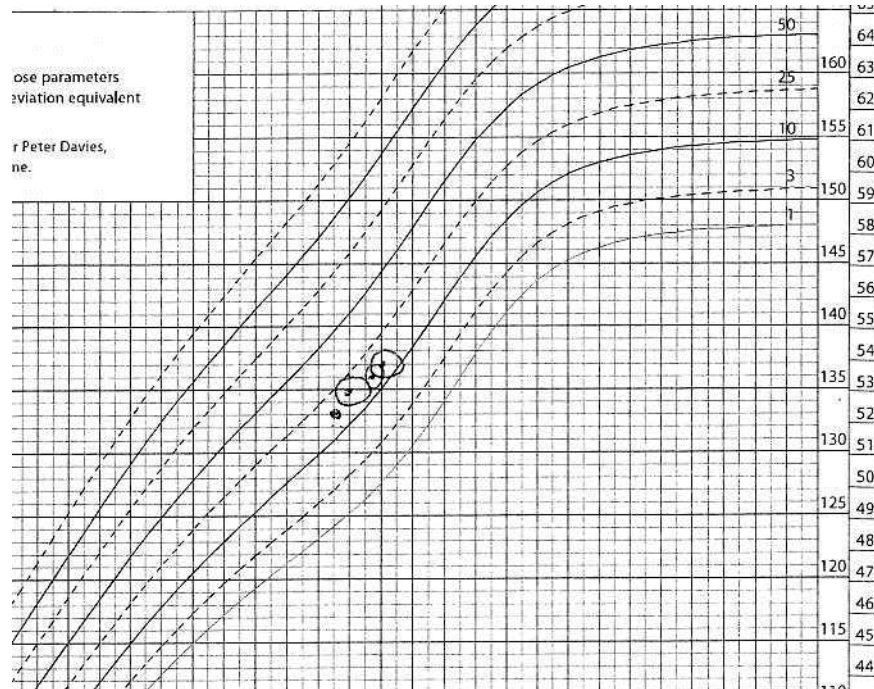


FIG. 9.2 Stages of illness and recovery. (Lask, 1993). Reprinted with permission.



Don't forget: some of the growth curves are for children who are not growing normally.



Outcome in 2012.

- Full recovery from anorexia nervosa.
- Growth as expected along centiles.
- Team sports.
- Wide-range of friends.
- Elected as class captain.
- Continues to take fluoxetine 20mg.

Historical Aspects

“The patients should be fed at regular intervals, and surrounded by persons who would have moral control over them, relations and friends being generally the worst attendants” – Sir William Gull (1874).

Jean-Martin Charcot: moral treatment of anorexia nervosa: “Curative influence of isolation” (from family) (1882).

Maudsley Family-Based Therapy

- Out-patient treatment developed by Chris Dare and colleagues and subsequently published as a manual:

Lock J., Le Grange D. et al.

Treatment manual for anorexia nervosa.

A family-based approach.

(2001) New York. Guildford.

The only FBT that has been subjected to RCT.

MFBT- Key Principles

- Designed for children aged < 19 years old with an illness duration of < 3 years.
- Draws on family strengths to overcome anorexia nervosa and opposes finding the family at fault.
- Integrates a variety of family therapy approaches but emphasises behavioural recovery rather than insight as a priority.

MFBT – Key Principles

- Two therapists.
- Conjoint and separated sessions.
- Research evidence: For high Expressed Emotion (EE) families (high criticism/hostility/over-involvement) separated FBT is the treatment of choice. For low EE conjoint FBT and separated FBT are equally effective.
- “Coaching” approach.

MFBT – Eclectic Approach

- Structural Family Therapy – disruption of cross-generational coalitions; promote unity of parental alliance; aligning the patient with sibling sub-system; ‘enactment’ – family meal.
- Strategic Family Therapy – “agnostic” view of aetiology.

MFBT – Eclectic Approach

- Systemic Family Therapy: family have the capacity for finding their own solutions to get the child to eat; non-critical stance; circular questioning.
- Narrative Family Therapy: externalisation of the illness.

Externalisation

- Michael White: “The person is not the problem, the problem is the problem”.
- Separating the illness from the child.
- Helping the child and family to separate ‘anorexic thinking’ from ‘healthy thinking’.
- Everybody working together to beat the anorexia.
- Reduces punitive responses from the parents.

MFBT – Treatment Phases

- Treatment divided into 3 phases over about a year:
- Phase 1: “concentrate on the horror of this life-threatening illness”, Parents are warned that :something very drastic has to happen for you to save (your child's) life”. Clinicians should have a “portentous, brooding and grave manner”. Whole family household expected to attend clinic.

MFBT – Phases of Treatment

- Phase 1: weekly sessions for 10 to 20 weeks. Emphasis on externalising illness, minimising criticism/hostile comments and parental unity. Family meal. Effect of the illness on the family. Parents are empathic about their child's ambivalence about eating but have a clear expectation that eating will happen. Starvation is not an option!

MFBT - Phases 2 and 3

- Phase 2: Sessions 11-16. When weight gain is sustained and the child accepts the need for dietary increase, the child is given greater control of their eating. Parents can focus on their marriage.
- Phase 3: When the child can maintain 95% ideal body weight by themselves. Addressing other adolescent issues. Sessions 4-6 weeks apart. Install a sense of vigilance to ward off risk of relapse.

Epidemiology

- Community and twin studies show that less than a third of cases of anorexia nervosa are seen for specialist assessment.
- Finnish Twin study: 4.2% lifetime prevalence of anorexia nervosa.

Prognosis in Anorexia Nervosa

- Highest mortality of all psychiatric disorders.
- Assessed at least 4 years after the onset of the illness in adolescents: 44% recovered (within 15% of ideal body weight), 25% seriously ill and 5% dead (Steinhausen et al. 2003).
- Maudsley Family Based Therapy: 75% recovery over several centres.

British Surveillance Study

Nicholls D. E., Lynn R. and Viner R.M.
Childhood eating disorders: British national
surveillance study (2011) British Journal of
Psychiatry, 198: 295-301.

Aim: “to identify new cases of early-onset eating disorders (< 13 years) presenting to secondary care over one year and to describe clinical features, management and one-year outcome”.

British Surveillance Study

- Overall incidence was 3.01 cases of eating disorder per 100,000 children aged 5-13 years per year.
- 37% anorexia nervosa.
- 1.4% bulimia nervosa.
- 43% eating disorder NOS.
- 19% showed determined food avoidance and were underweight without weight/shape concerns

British Surveillance Study

- 96% determined food avoidance
- 84% preoccupation with food
- 71% fear of weight gain
- 67% preoccupation with body weight
- 51% preoccupation with body shape
- 43% excessive exercise
- 31% somatic complaints
- 19% self-induced vomiting
- 5% binge-eating, 1% laxative/diuretic use.

British Surveillance Study

- 208 patients
- 82% female
- 86% white British, 5% Asian, 2.5% Irish, 1% black.
- Mean age: 11 ½ years. 59% pre-pubertal.
- Youngest age for any eating disorder was 6 and for anorexia nervosa, 9.
- Of those with anorexia nervosa 88% were female.

British Surveillance Study

- 41% had psychiatric co-morbidity (depression, anxiety disorder).
- 44% had a family history of mental illness (mostly depression and anxiety disorders).
- 21% had early feeding difficulties.
- Time to presentation > 8 months.

British Surveillance Study

Hospital Admission:

- 50% were admitted to hospital (usually at diagnosis); 71% with anorexia nervosa were admitted.
- 11% had nasogastric tube feeding (all with anorexia nervosa).
- 13% were prescribed psychotropic medication (SSRI > atypical antipsychotic)

British Surveillance Study

Outcome at one year:

- Data available for 76% cases.
- 73% improved
- 6% worse
- 10% unchanged
- 60 cases were still in treatment. No deaths. Co-morbidity same as baseline.

Take-Home Messages

- Children can become very physically compromised very quickly because of low fat reserves and high BMR.
- Even though a child may seem 'healthy' beware hypothermia and bradycardia.
- Consider the whole system (the family) – especially parental mental disorder.
- Despite the evidence for good prognosis of anorexia nervosa in children, there is a tendency for mood/anxiety to persist linked to an increased risk of having a strong family history of mental illness and strong obsessive-compulsive personality traits in the child.

Thank you

Useful websites:

- www.AEDWEB.ORG
- www.ed.org.nz