Eating Disorders: Practical Assessment and Impact on Gastrointestinal System

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Aim

- To provide an overview of eating disorders and the impact of an ED on gastrointestinal tract
- To discuss assessment and referral to appropriate services

Definition of an Eating Disorder

- Preoccupation with food and/or weight and body shape
- Very disordered eating habits and weight control behaviour
- Affects physical and/or psychosocial functioning

Types/Classification of Eating Disorders

- Anorexia nervosa
- Bulimia nervosa
- Binge eating disorder (BED)
- Other specified eating and feeding disorders (OFSED)

Diagnostic Criteria & Features of Anorexia Nervosa

- Low bodyweight e.g. BMI 17kg/m2 or less, 15% or significantly lower than expected
- Intense fear of gaining weight or becoming fat or persistent behaviour that inhibits weight gain despite low weight
- Disturbance in perception of body weight, overvalued ideas of weight and shape and lack of recognition of seriousness/implications of low weight.
- Amenorrhoea (for at least 3 months) or delay in menarche. Men will report loss of libido & loss of early morning erections

Sub types of Anorexia Nervosa

2 subtypes of AN:

- Restricting subtype: food restriction & starvation
- Binge/purge subtype: food restriction, excessive exercise and purging behaviours such as use of laxatives, diuretics, enemas and self induced vomiting. Misuse or omission of medication such as insulin

Features of anorexia nervosa (continued)

Mainly due to effects of starvation & vomiting:

- Dental caries, eroded teeth enamel
- Hypotension, arrhythmias, bradycardia, hypothermia
- Constipation, swollen tender abdomen due to reduced colonic motility
- Hypokalemia, hyponatremia, hypoglycaemia, altered thyroid function, anaemia, amenorrhoea, delay in puberty, arrested development, osteoporosis
- Infertility due to amenorrhoea & ? sexual inactivity – return of fertility can be delayed in up to 30% of women.
- Renal calculi
- Dry scaly skin, callused skin, hair loss, lanugo hair
- Peripheral neuropathy, pseudo cerebral atrophy (which corrects with weight gain)

Anorexia Nervosa: Differential Diagnosis

- Hyperthyroidism
- Diabetes
- Brain tumours
- Gastrointestinal disorders e.g., Crohn's disease
- Loss of appetite
- Depression, anxiety &/or obsessive-compulsive disorder
- Body dysmorphic disorder

Diagnostic Criteria and Features of Bulimia Nervosa

- Recurrent episodes of binge eating characterized by eating an amount of food which is larger than most would eat in a similar time and lack of control of eating (cannot stop what or how much)
- Inappropriate compensatory behaviours to prevent weight gain such as food restriction, excessive exercise and purging behaviours such as use of laxatives, diuretics, enemas and self induced vomiting. Misuse or omission of medication such as insulin.
- Self evaluation based around weight and shape
- For a diagnosis of BN binge eating and compensatory behaviours must occur at least once a week on average for 3 months.

Diagnostic Criteria and Features of Bulimia Nervosa

- Binge eating usually occurs in secret & continues until person is uncomfortably full
- May be prompted by low mood or stressful event
- Ashamed of their behaviour and tend to conceal symptoms
- May use several compensatory behaviours to avoid weight gain. Vomiting is most common, relieves discomfort and avoids weight gain.
- Usually, normal body weight or overweight

Features of Bulimia Nervosa (continued)

- Arrhythmias, cardiac failure (sudden death)
- Electrolyte imbalances
- Oesophageal erosions/perforation
- Gastric/duodenal ulcers
- Pancreatitis
- Dental erosion
- Constipation

Bulimia Nervosa Differential Diagnosis

- Binge eating disorder
- Upper gastrointestinal disorders with vomiting
- Brain tumours
- Personality disorder
- Depressive disorder
- Obsessional Compulsive disorder
- Drug related increased appetite (e.g., steroids)

Binge Eating Disorders

- Person has recurrent episodes of bingeing (similar to BN) but not compensatory weight loss behaviours
- Lack of control with their eating
- Person tends to be overweight/obese
- Marked distress linked with binge eating. Ashamed of behaviour, attempt to conceal. Feel disgusted, depressed and guilty after binge

Other specified eating and feeding disorders (OFSED)

Person may have some of diagnostic criteria for AN & BN but not all

Examples are:

Atypical anorexia nervosa – all criteria for AN met but weight is normal

BN (of low frequency/limited duration)

All criteria met but behaviours occur less than weekly or less than 3 months duration

Other specified eating and feeding disorders (OFSED)

Binge eating disorder BN (of low frequency/limited duration) - all criteria met but binge eating occurs less than weekly or less than 3 months duration

Purging disorder – recurrent purging as weight loss strategy but in absence of binge eating

Detection of ED

- Can be very difficult to detect due to shame, denial, secrecy or not recognising
- Differential diagnosis
- Most people are within the OFSED category which is harder to detect

ED or GI disorder?

Individuals with eating disorders may present in GI services with a wide range of GI symptoms, such as

- early satiety
- postprandial discomfort
- abdominal fullness or discomfort or cramping
- swollen salivary glands
- diarrhoea and/or constipation

These symptoms form part of their ED; however, their ED also causes the symptoms.

Effects of EDs on GI Tract

- Delayed gastric emptying and slowed gastrointestinal motility, causing constipation and abnormal oesophageal activity These symptoms are associated with early satiety, bloating and abdominal distension, which lead to a sense of feeling fat and may reinforce the perceived need for further self-starvation or purging behaviours
- Individuals with bulimia nervosa or binge eating can experience increased gastric capacity by consuming large amounts of food in a short period of time due to binge eating.

Effects of EDs on GI Tract

- Dental caries and erosion are seen as early as 6 months after beginning self-induced vomiting
- Due to frequent self-induced vomiting, unilateral or bilateral enlargement of the salivary glands can be seen
- Individuals who self-induce vomiting usually complain of hoarseness, dysphagia, heartburn and potentially haematemesis due to Mallorry Weiss (oesophageal) tears

Effects of EDs on GI Tract

- Oesophagus may experience mild irritation through to oesophageal rupture.
- Lower oesophageal sphincter can become lax after many months of repeated self-induced vomiting, but strictures can also form
- Acute gastric dilatation - a very serious condition that typically occurs after binge eating. Presents with abdominal pain and vomiting that is not self-induced, and requires emergency admission to hospital. Gastric perforation can occur if a person with acute gastric dilatation continues to eat

Effects of EDs on GI Tract

- Use of excessive laxatives over a prolonged period of time can cause dilated and atonic colon. May be irreversible on cessation of laxatives so colectomy required
- Stopping laxatives can cause oedema and weight gain, and therefore cessation can be difficult to achieve.
- Gastric and duodenal ulcers occur in 1:6 people with an ED.
- After recovery, a person with an ED may continue to experience GI symptoms

GI Disorders, ED or Both?

Laura, a 22 year old female attending clinic for Crohn's disease heard me recruiting patients to a study regarding eating disorders. She asked to speak to me privately and disclosed symptoms of anorexia nervosa. She was severely underweight. She was assessed and transferred to an in-patient eating disorder unit.

Assessment of ED

- Unlike the previous case study people generally do not disclose eating disorders
- Although predominantly experienced by women – men and younger children can also be affected
- If you suspect an ED – follow your intuition but not to the exclusion of other parts of the assessment.

Assessment

Asking specific questions with regards to the existence of ED behaviours, such as

- restriction of food or avoidance of specific food-types
- laxative use/misuse or vomiting
- irregular eating patterns
- food restriction followed by overeating
- Also note if they are reluctant to be weighed

Screening Tool for EDs

- SCOFF– screening tool used in primary and secondary care but not diagnostic
- Self-report questionnaire that nurses can give to their patients and facilitate a discussion with them about the results. For the patient, it may raise questions that they wish to discuss with their specialist nurse.

SCOFF Questionnaire (Morgan et al. 1999)

Do you make yourself **sick** because you feel uncomfortably full?	**YES**	**NO**
Do you worry you have lost **control** over how much you eat?	**YES**	**NO**
Have you recently lost more than **one** stone (7.7 kg) in a 3 month period?	**YES**	**NO**
Do you believe yourself to be **fat** when others say you are thin?	**YES**	**NO**
Would you say that **food** dominates your life?	**YES**	**NO**

Two or more positive answers should raise suspicion that the person may have an eating disorder and further assessment is required

Case Study

Jill, 55 had completed the SCOFF as part of a research study whilst attending for biofeedback treatment for constipation. She answered Yes to three questions. When asked to discuss her results in more detail she revealed a 30 year history of bulimia nervosa of which none of her family were aware. She felt ashamed and guilty. We spent time discussing a referral to eating disorder services however Jill was very fearful of her family finding out.

Referral

Establish what mental health/eating disorder services are available in your Trust.

Is there a liaison mental health service at your local or nearby hospital or a mental health practitioner in your PCT? They may assess one of your patients with you and/or provide education for your team around manging their care

Consideration of training sessions in the recognition of ED or case consultation with the relevant ED team would also be beneficial.

Information leaflets in clinics about EDs and how to recognise them, as well as guidance to online services & resources such as BEAT.

Focus on the person

Remember that being in control is fundamental to someone with an eating disorder and changes to this control are incredibly frightening. Therefore it is imperative to work collaboratively

Key points

- Eating disorders can have devastating effects on a person and affect every aspect of their life
- Specialist nurses in GI are in a key position to detect eating disorders
- Early detection of an ED will ensure more effective interventions and better outcomes.