Management of Eating Disorders
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No relevant financial disclosures
I will not discuss any off-label uses of any medications or devices

Learning Objectives

1. Describe the scope of disordered eating behaviors in adolescence including DSM eating disorders.
2. Discuss appropriate screening and management strategies.
3. Formulate an approach to caring for patients with eating disorders that addresses both the medical and psychiatric complexity of their experiences.
Richard Morton c. 1689

Sir William Gull c. 1868

"Nouvelle Iconographie de la Salpêtrière" c. 1900
c. 1743 “true boulimus”:

having an intense preoccupation with food and overeating at very short intervals, terminated by vomiting

Jessica is a 17 yo who presents with her parents for evaluation of weight loss and fatigue. She runs cross country and began to lose weight during pre-season. She has lost 30 pounds over 3 months.

She describes a desire to lose more weight and is fearful of regaining weight. She isn’t concerned about her fatigue or other consequences of her weight loss.
On exam, she is orthostatic, has cool extremities, and appears pale. Her resting pulse is 45.

Body image is a subjective conception of appearance that incorporates both physical and perceptual dimensions.

Media is the “super-peer” that is the most aggressive purveyor of images and narratives of ideal slender beauty.
The average male model lost 12 pounds of fat, while gaining 27 pounds of muscle over a period of 25 years (Pope, 2002)
Between 1964 and 1998 action figures have become more muscular with smaller waists and larger chests and biceps (Pope, 2002).
42% of 6-9 year old girls want to be thinner
9yo start to experiment with dieting
$33 Billion spent on dieting and diet-related products each year
What is Disordered Eating?

Restriction
Fad diets
Bingeing
Purging
Other behavioral responses to intake
Eating in secret
Abusing medications
[Disordered exercise behaviors]

It’s a Spectrum

Disordered Eating

2,451 Norwegian students aged 15-17 years

Prevalence of disordered eating was 64.3% among girls and 45.0% among boys (p<0.001)

A smaller girls-boys ratio than expected

Torstveit et al, PloS One, 2015, PMID 25825877
Epidemiology - Boys

10% of eating disorder pts are male (Wolf, 1991)

Male patients are often overlooked and stigma decreases help-seeking (Griffiths et al., 2015)

Real figure could be up to 25% (Hudson et al., 2007)
   – Community (25%) vs. treatment-seeking (10%) (Sweeting et al., 2015)

Screening

SCOFF

1. Do you make yourself Sick because you feel uncomfortably full?
2. Do you worry you have lost Control over how much you eat?
3. Have you recently lost > One stone (6.3 kg or 14 lb) in a 3-mo period?
4. Do you believe yourself to be Fat when others say you are too thin?
5. Would you say that Food dominates your life?

Teens at higher weights may not be getting proper nutrition and teens with “normal” weights may be engaging in unhealthy practices.
Shape and weight concerns

Do you think you’re too big, too small, or in between?

How do you feel about your body shape/size?

Do you constantly think about your weight?

Does food control your life?

Eating and Exercise behaviors

Have you been doing anything to try to lose or gain weight?

Do any of your friends do anything to lose or gain weight?

Are you doing anything to change the shape or size of your body?

Anorexia Nervosa

Caloric restriction resulting in significantly low body weight

Fear of wt gain and/or persistent behaviors that prevent wt gain

Body image disturbance and undue influence on self-worth

Subtypes: restricting & binge/purge
**Bulimia Nervosa**

Binge eating; loss of control

Inappropriate compensatory behaviors (vomiting, laxatives, diuretics, exercise, fasting/dieting)

At least 1x/wk for 3 mos

Dissatisfaction with body shape and weight

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**Binge Eating Disorder**

Eating an unusually large amount of food with a sense of lack of control without compensation

3 of 5

- Eating much more rapidly than normal
- Eating until uncomfortably full
- Eating large amounts when not hungry
- Eating alone because of being embarrassed
- Feeling disgusted with self, depressed, or very guilty

1x/week for at least 3 months

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**Avoidant/Restrictive Food Intake Disorder**

Eating or feeding disturbance (e.g., lack of interest; avoidance due to sensory characteristics; concern about aversive consequences) with failure to meet nutritional needs associated with one or more of:

- Significant weight loss (or failure to grow normally)
- Significant nutritional deficiency
- Dependence on enteral feeding or PO supplements
- Marked interference with psychosocial functioning
Other Specified
Feeding or Eating Disorders

Includes atypical anorexia, subthreshold disorders, night eating syndrome, sleep related eating disorder, and purging disorder

Muscle Dysmorphia / Bigorexia / Reverse Anorexia

Anorexia athletica / Hypergymnasia

AN Management

Nutritional rehabilitation and psychotherapy
Monitoring for complications and safety

BN Management

Nutritional rehabilitation
Psychotherapy
Pharmacotherapy
Complications depend upon the method and frequency of purging.
Stomatitis, cheilosis
Periodontal disease, caries
Sialadenosis

Esophagitis, erosions, ulcers, MW tears
Strictures and dysphagia
Boerhaave's

Electrolyte disturbance
Dehydration and contraction alkalosis
Aspiration

Abrasions/calluses on dorsum of hand and knuckles
Russell's Sign
Ipecac can be toxic
- Muscle weakness, pain, and stiffness
- Emetine accumulates in cardiac muscle – cardiomyopathy

Laxatives ineffective for weight loss
Stool thin layer chromatography
Reflex constipation
Melanosis coli
Rectal prolapse
Hypovolemia; hyperchloremic metabolic acidosis
Diuretics also ineffective for weight loss
   – dehydration stimulates RAA system

Electrolyte abnormalities

Pseudo-Bartter syndrome

**Effects of Starvation**

Medical complications due malnutrition as well as refeeding

Length, severity, and number of episodes and timing of those episodes

**Neurologic Complications**
Volume deficits in both gray and white matter
Cognitive impairment in some domains
Changes in neurotransmitters

Gastrointestinal Complications
Gastroparesis
Delayed small bowel transit time
Transaminitis (starvation or refeeding)
SMA syndrome
Pancreatitis

Endocrine Complications
Respect
Hormones
Hypothyroidism, euthyroid sick syndrome

Hypercortisolism

GH resistance, low IGF-1

Variable vasopressin secretion (DI or SIADH)

Hypoglycemia

Hypogonadotropic hypogonadism

Osteopenia/Osteoporosis
– nutritional deficiencies, low estrogen, GH resistance, hypercortisolemia

May ovulate despite being amenorrheic
– higher rate of pregnancy complications

Cardiovascular Complications
Myocardial mass loss, decreased cardiac output
Conduction abnormalities, dysrhythmias
Pericardial effusion
CHF during refeeding
MVP
Bradycardia
Orthostatic changes

Additional Sequelae

Growth and development
— Young adolescents/pre-menarcheal pts

Renal
— Reduced GFR and problems concentrating urine
— K, Mg, Phos are occasionally depleted

Pulmonary
— Wasting of respiratory muscles, decreased pulmonary capacity
— Enlargement of peripheral lung units without alveolar septal destruction

Heme
— Hypoplastic/aplastic bone marrow, gelatinous degeneration with serous fat atrophy

Levels of Care
Levels of Care

Medical inpatient
Eating disorders inpatient
Residential treatment
Partial hospitalization
Intensive outpatient
Outpatient

Outcomes

50% good
25% intermediate
25% poor

Outcomes

All cause mortality 6x greater than general population
Highest lifetime mortality of any psychiatric illness

New “Diagnoses”
'Pregorexia': Extreme dieting while pregnant

By Kelly Wallace, CNN

'Bigorexia' and the Male Quest For More Muscle

By Jailene Nolasco

Orthorexia: When healthy eating becomes an unhealthy obsession

By Isadora Storck

The text contains articles discussing extreme dieting behaviors and the male obsession with building muscle. The articles are from various sources, including CNN and TIME.
The intensity of their distress overrides primal instincts.
Coping and control are central.

Shame is common.

While most illnesses are egodystonic, eating disorders are often egosyntonic.

Eating disorders are therefore characterized by secrecy.
countertransference
\ka\text{"unt-ar-tran(t)s-\text{"far-an(t)s, -\text{"tran(t)s-\text{"}}}\}

the complex of feelings of a clinician toward the patient

Acute clinical presentations are the perfect storm

Key Points

1. Disordered eating is a spectrum and proactive screening and management is important.
2. Medical complications are varied and typically drive level of care decisions.
3. Helping eating disorders patients requires a deep understanding of their experiences in addition to technical know-how.

Questions?