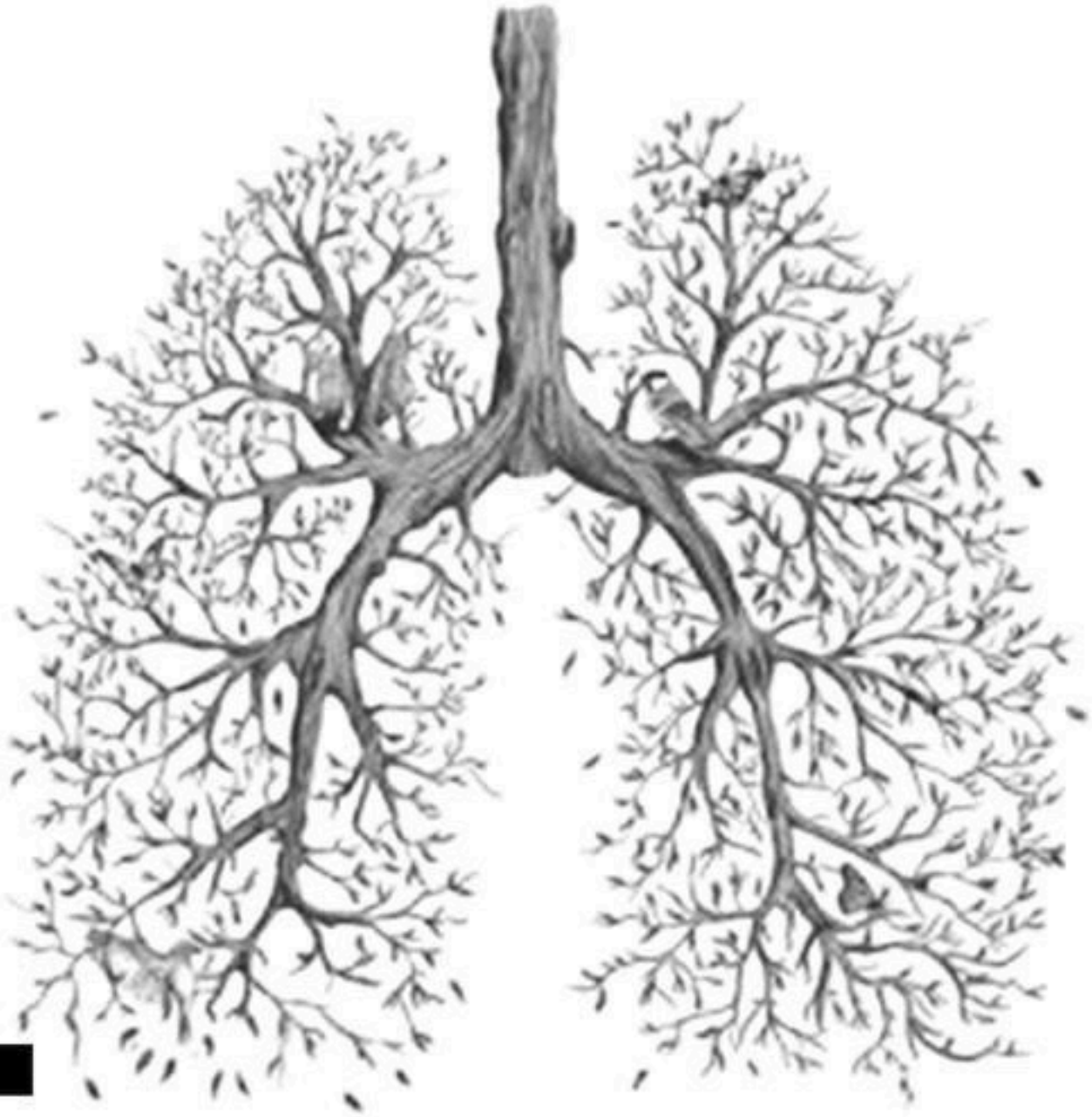




Medical Committee
The University of Jordan

Community Medicine



Slides

Sheet

Slide #: 13

Doctor: *Ahmad Al-Bataineh*

Date:



Nutrition in Eating Disorders

Krause's *Food
& Nutrition Therapy*

Eating Disorders

- n** Debilitating psychiatric illnesses characterized by a persistent disturbance of eating habits or weight control behaviors
- n** Anorexia nervosa
- n** Bulimia nervosa
- n** Eating disorder not otherwise specified (EDNOS)
- n** Binge eating disorder (BED)

Diagnostic Criteria

- n** American Psychiatric Association (APA) criteria are the standard
- n** Diagnostic and Statistical Manual (DSM TR-IV)

Anorexia Nervosa

n A disease characterized by:

- Refusal to maintain a minimally normal body weight
- Body image distortion
- Amenorrhea in post-menarchal females

n May be one of two subtypes

- Restricting
- Binge eating/purging

Prevalence of Anorexia Nervosa

- n** 0.3% to 0.7% of women, rate is about one tenth in men
- n** Initial presentation usually during adolescence or young adulthood
- n** Genetic, environmental and psychosocial factors
- n** 5% to 25% of patients die

Psychological Features of Anorexia

- n Perfectionism
- n Compulsivity
- n Harm avoidance
- n Feelings of ineffectiveness
- n Inflexible thinking
- n Overly restrained emotional expression
- n Limited social spontaneity
- n May coexist with major depression, anxiety disorders, obsessive-compulsive disorder, personality disorders, and substance abuse

Bulimia Nervosa

- n** An illness characterized by repeated episodes of binge eating followed by inappropriate compensatory behaviors to prevent weight gain
 - Self-induced vomiting, laxatives misuse, diuretic misuse, compulsive exercise, or fasting
- n** 1% to 3% of adult women
- n** Binge = consumption of unusually large amount of food in a discrete period
- n** Psychiatric co-morbidities

Bulimia Nervosa(2-4%)

n APA Criteria:

The official diagnostic criteria established by the American Psychiatry Association (APA) includes the following behaviors:

- *Recurrent episodes of binge eating, rapid consumption of a large amount of food in a discrete period.
- *Lack of control over binges
- *Regular self-induced vomiting, use of laxatives or diuretics, strict dieting or fasting, or vigorous exercise.
- *Average of two binge-eating episodes a week for at least 3 months.
- *Overconcern with body shape and weight.
- *Incidence of bulimia nervosa is 2-4%.

As many as 20 % of college-age females may engage in bulimic behaviors.

Eating Disorder Not Otherwise Specified (EDNOS)

n A diagnostic category for eating disorders that meet most, but not all, criteria for either anorexia nervosa or bulimia nervosa

Binge Eating Disorder (BED)

- n** A disorder characterized by the occurrence of binge eating episodes at least twice a week for a 6-month period
- n** No inappropriate compensatory behaviors after a binge
- n** Feeling of powerlessness
- n** Emotional distress
- n** Most are overweight
- n** Night eating syndrome and sleep disorders

Eating Disorders in Childhood

- n** Symptoms of childhood eating disorders
- n** Warning signs of a childhood/early adolescent eating disorder

Eating Disorders in Specific Groups

n Athletes

- Activities that emphasize lean body type, male bodybuilders and competitive wrestlers
- Internal and external pressures to achieve unrealistic body weight
- Female athlete triad

n Individuals with diabetes mellitus

- Complex medical, nutritional, and psychological management

Treatment Approach

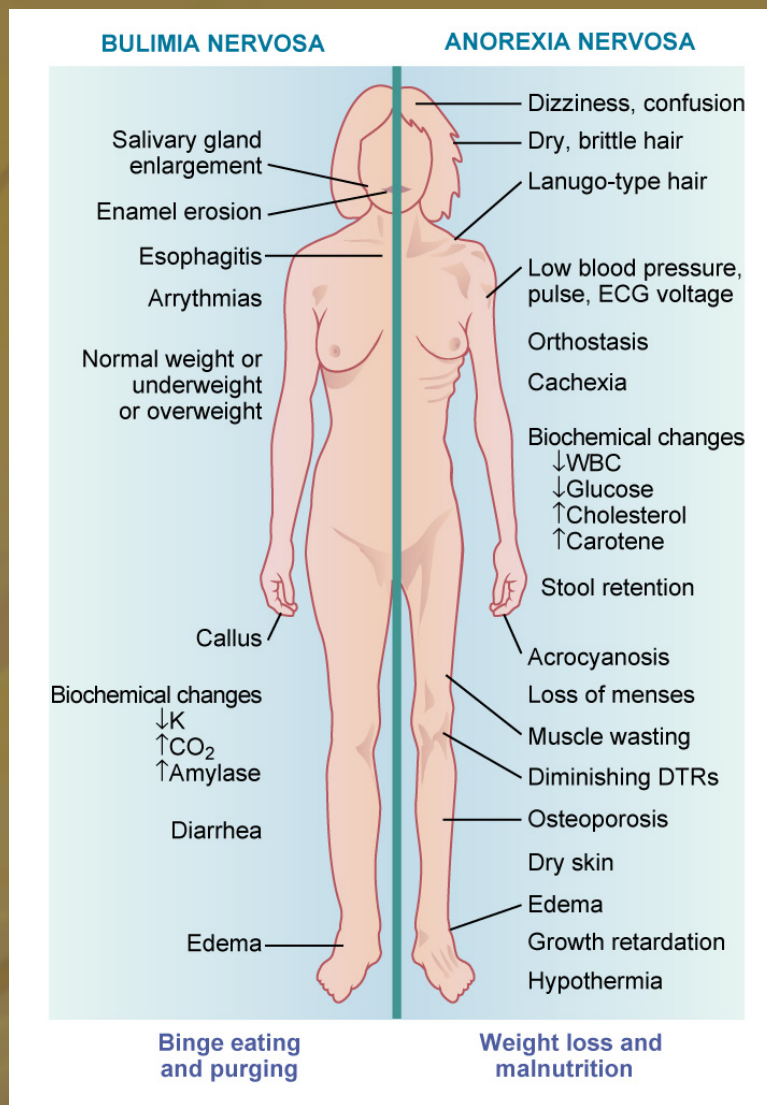
- n** Multidisciplinary:
psychiatric/psychological, medical,
nutritional
- n** Treatment includes inpatient
hospitalization, residential treatment, day
hospitalization, intensive outpatient
treatment, and outpatient treatment

Clinical Characteristics and Medical Complications

n Anorexia nervosa

- Cachectic and prepubescent body habitus
- Lanugo, dry and brittle hair
- Hypercarotenemia
- Cold intolerance, cyanosis of the extremities
- PEM and cardiovascular complications
- GI complications
- Osteopenia
- Effects on growth and development in children and adolescents

Physical Signs and Symptoms of Anorexia Nervosa and Bulimia Nervosa



Clinical Characteristics and Medical Complications–cont'd

n Bulimia nervosa

- Usually normal weight and secretive behavior
- Signs of self-induced vomiting
- Results of chronic vomiting
- Effects of laxative and diuretic abuse

Psychological Management

n Goals

- Help patients understand and cooperate with nutritional and physical rehabilitation
- Help patients understand and change behaviors and dysfunctional attitudes
- Improve interpersonal and social functioning
- Address psychopathology and psychological conflicts

n Behavioral re-inforcers

n Psychotherapy, cognitive behavioral therapy, family/marital therapy

n Assessment instruments

Nutrition Assessment

n Diet history

- Over- and under-reporting
- Calories retained from binges
- Specific dietary practices and chaotic eating
- Nutritional adequacy

n Eating behavior

- Food aversions
- Unusual or ritualistic behaviors
- Trigger foods

Nutrition Assessment–cont'd

n Laboratory assessment

n Vitamin and mineral deficiencies

- Hyper-carotenemia, iron deficiency anemia, osteopenia and osteoporosis

n Fluid and electrolyte balance

- Significant problems with vomiting and laxative and diuretic abuse

n Energy expenditure

- Low REE in AN, unpredictable in BN

n Anthropometric assessment

- Skinfolds, DEXA, BIA, body weight
- Long-term monitoring

Medical Nutrition Therapy and Counseling: Anorexia Nervosa (AN)

- n** Goals: correct biological and psychological sequelae of malnutrition, restore body weight, normalize eating patterns, normalize hunger/satiety cues
- n** Hospitalize when patient is medically unstable, severely malnourished, or growth retarded
- n** Institutional protocols: patient participation in menu planning and meal planning approaches
- n** Outpatient: RD's counseling skills are important
- n** Most patients are precontemplative
- n** Reasonable weight-gain goals: 2-3 lb/week for inpatient, 0.5-1 lb/week for outpatient

Medical Nutrition Therapy and Counseling: AN–cont'd

- n** Progressive increase in caloric prescription: +100 to 200 kcals every 2 to 3 days
- n** Aggressive refeeding of severely malnourished AN patients (<70% standard body weight); care to avoid refeeding syndrome
- n** May need 3,000 to 4,000 kcals/day to achieve goal weight
- n** Intake of macronutrients and micronutrients
- n** Use of snacks and supplements

Medical Nutrition Therapy and Counseling: Bulimia Nervosa

- n Reasonable plan of controlled eating
- n Most patients receive outpatient counseling
- n Goal to interrupt binge-and-purge cycle, restore normal eating behavior, stabilize body weight
- n Assessment of energy needs
- n Macronutrient and micronutrient intake
- n Restoration of hunger and satiety cues
- n Cognitive behavioral therapy
- n Stages of readiness to change

Medical Nutrition Therapy and Counseling: Binge Eating Disorder

- n** Nutrition counseling and dietary management
- n** Individual and group psychotherapy
- n** Medication
- n** Goals: self-acceptance, improved body image, increased physical activity, better overall nutrition

Topics for Nutrition Education

- n Impact of malnutrition on growth and development
- n Impact of malnutrition on behavior
- n Set-point theory
- n Metabolic adaptation to dieting
- n Restrained eating and disinhibition
- n Causes of bingeing and purging
- n What does “weight gain” mean?

Modified from Schebendach J, Nussbaum MP: Nutrition management in Adolescents with eating disorders. *Adoles Med: State Art Rev* 3 (3): 556, 1992.

Topics for Nutrition Education– cont'd

- n Impact of exercise on caloric expenditure
- n Ineffectiveness of vomiting, laxatives, and diuretics in long-term weight control
- n Portion control
- n Food exchange system
- n Social dining and holiday dining
- n Food Guide Pyramid
- n Hunger and satiety cues
- n Interpreting food labels
- n Nutrition misinformation

Modified from Schebendach J, Nussbaum MP: Nutrition management in Adolescents with eating disorders. *Adoles Med: State Art Rev* 3 (3): 556, 1992.

Prognosis

- n** Relapse in AN: up to 50% of patients require re-hospitalization
- n** Enduring morbid food and weight preoccupation
- n** Outcomes are better in younger patients
- n** High mortality rates associated with AN
- n** Relapse in BN

Focal Points

- n** Anorexia nervosa and bulimia nervosa must be understood and appreciated as potentially chronic disorders characterized by periods of relapse.
- n** Refeeding in eating disorders requires the collaborative effort of medical and mental health professionals, with the support of friends and family.
- n** Nutrition rehabilitation can correct some (i.e., hypometabolic state, vital sign instability) but not all (organ mass, bone mass, and growth) of the pathophysiologic consequences of malnutrition in eating disorders.
- n** Successful long-term treatment can take years, and the expectation of a quick cure should be dispelled.