

# Anorexia nervosa

Anorexia nervosa is a relatively common psychiatric illness that mainly affects adolescent girls, but can also affect males. Due to extreme starvation, it has devastating effects mainly lead to physical and mental development impairment which can eventually lead to death.

## Diagnosis

1. Diagnosis
2. Weight
  - weighing of at least 15% below the expected weight (whether reduced or never achieved)
  - Body Mass Index ( **BMI** ):  $\text{weight (kg)} / \text{height (m}^2\text{)}$  less than **17.5** .
  - Prepubertal patients do not meet the expected weight gain during growth.
3. The patient **reduces weight by** own activities, limiting food intake, excessive exercise, etc.
4. Specific psychopathology is mainly represented by the **fear of obesity that** persists even in severe underweight, **distorted perception of one's own body** and intrusive, controlling thoughts of maintaining underweight, sometimes eating rituals.
5. Extensive **endocrine disorder** , hypothalamic-pituitary-gonadal axis, **amenorrhea** in women (often covered by HRT), loss of sexual interest in men
6. **Delayed puberty** . Beginning before puberty, delays or stops further development (growth, breast development, primary amenorrhea, pediatric genitalia in boys). After recovery, puberty will be completed, but menarche may be delayed.

Further examinations could include

- complete laboratory examination, including endocrine parameters;
- EEG, CNS MRI, neurological examination;
- ECG, eye examination, endocrinological examination

## Eating disorders

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Eating disorders are mental illnesses that significantly affect the somatic condition of patients. It is one of the so-called diseases of civilization, which spread is related to the modern ideas of what a healthy successful person should look like, the promotion of slimness, and healthy nutrition. Other triggers like reactions to trauma, divorce or family conflict also play an important role.

According to the biological hypothesis, primary hypothalamic dysfunction affects the hypothalamic-pituitary-gonadal axis. The influence of genetic predispositions is also assumed. Overweight and obesity are also risk factors.

Iron

## Epidemiology

- the incidence has been on rise for the past years where 0.5 -1 % of women between the age of 15 - 30 suffer from eating disorders
- Girls and young women are affected 10 times more often than boys and men.
- It typically begin in puberty and adolescence (between the ages of 14 and 15 and between the ages of 17 and 18).

## Causes

The causes of anorexia nervosa **are not entirely clear** . The **importance of genetic predisposition** is assumed .

Usually a young girl acquires a **diseased feeling of thickness** , which she wants to get rid of at all costs, and a distorted image of her own body; then intrusive, compulsive thoughts about keeping weight low. The recent rise in the disease is the trend of slenderness as a sign of beauty. Any negative remark about a girl's character made by someone from the collective can have a similar effect. The sufferer begins to lose weight by **drastically reducing food intake** and **strenuous exercise**. Manifestations of anorexia nervosa are threatened by more intelligent girls with a tendency to care, who tend to do well in school. If the disease is manifested before puberty, **puberty is delayed or does not begin** (breast development, primary amenorrhea, children's genitalia in boys), puberty occurs after recovery.

**Possible cause :**

- **low resistance of the individual to stress** ;
- **fear of adulthood** - they are afraid that they will not be able to handle "adult" tasks, they prefer to stay small, thin, to resemble a child;
- **trying to be perfect** in everything and not disappointing parents or others;
- strong dependence on the mother or excessive care from parents;
- the desire for independence, a feeling of independence and gaining self-confidence, deciding what and in what quantities to eat;
- **the pressure of society** , where slenderness is preferred as a symbol of beauty and success;
- **media pressure** - television, internet, fashion magazines.

## Clinical picture

náhled|Habitus u mentální anorexie

- cachexia
- amenorrhea
- dry skin covered with noticeable fine hair
- hair loss and increased nail fragility
- abdominal pain and constipation (severely reduced stool frequency due to severely limited food intake)
- bradycardia and arrhythmias
- metabolic changes including: hypokalemia , hypokalemic alkalosis, hypochloroemia, dehydration
- anemia
- mental changes:
  - attempts to lose weight through drastic diets and exercise, abuse of laxative and inducing vomiting.
  - depression, increased irritability, increased conflicts with parent, self harm ,suicidal behavior, fear of food..

The level of cholesterol increases , paradoxically, due to the metabolic disruption, which exist in the organism. However, the greatest danger is the occurrence of heart rhythm disorders which can lead to sudden death!

## Complications of systemic disease

- Kidneys - hypokalemia , metabolic alkalosis , edema;
- GIT - parotid hypertrophy, slowed gastric emptying, constipation;
- cardiovascular system - bradycardia , hypotension, arrhythmias ;
- blood - hypercholesterolemia;
- dermatology - dry skin, perioral dermatitis, thin hair growth;
- dentistry - tooth decay;
- endocrinology - decreased insulin, increased cortisol and CRH;
- psychological - restriction of interests in diets, disorders of concentration, black and white thinking, distrust, shame, affective lability;
- social - isolation, loss of employment, loss of family background, economic problems..

## Differential diagnosis

- complicated by denying difficulties, concealing food rituals, refusing treatment
- must be distinguished from cachexia from underlying diseases - tuberculosis , tumors, hyperthyroidism , Addison's disease , diabetes mellitus , Crohn's disease , malabsorption...

## Treatment

Treatment requires the cooperation of physicians from several disciplines. Intensive **psychiatric treatment** combined with long-term hospitalization, close **control of food intake**, and **family support** may be the only way to manage anorexia nervosa. The **main** goal is **nutritional rehabilitation** , ie the induction of a normal eating regime.

- improvement of nutritional status and normalization of the internal environment (emphasis on the earliest possible restoration of normal oral nutrition, nasogastric tube nutrition, parenteral nutrition exceptionally)
- hormone replacement therapy to correct amenorrhea (risk of osteoporosis and irreversible genital changes);
- psychiatric care, psychotherapy, family therapy

## Prognosis

Anorexia nervosa has a chronic course. Only 10% of patients recover within 2 years. Even in cured patients, conspicuous eating habits persist. Mortality is 5-15%, ie the highest of all psychiatric illnesses.

## Links

### Related articles

- Eating disorder • Bulimia Nervosa

## Sources

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## References

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