PSYCHOSOMATIC PARAMETERS IN PATIENTS WITH LONG-LASTING EATING DISORDERS

Marina Artemieva[1], Boris Tsygankov[2], Ivan Danilin[1], Roman Suleymanov[1] & Anastasiya Lazukova[1]

[1]Peoples' Friendship University of Russia, Moscow, Russia
[2]A.I. Evdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia

Eating disorders (ED) is a group of specific conditions involving not only mental, but also somatic, neurological, and endocrine disorders, often leading to cachexia with multiple organ failure and even death.

Using psychopathological, experimentally-psychological and follow-up, methods, more than 500 patients with ED who underwent treatment at the clinical bases of the Department of psychiatry and medical psychology of RUDN University at the period of 1989 to 2015 were examined. The duration of follow-up underwent up to 20 years. The method of high performance liquid chromatography was used to assess the functional state of catecholamine system.

Parameters of patients were studied considering the duration and severity of ED; long-term effects of extended fasting were studied and revealed the specific parameters of the mental processes at different stages of ED; the most frequent somatic consequences of ED. The research-based principles of therapy, avoiding complications of withdrawal from prolonged fasting were developed.

All patients were divided into four groups: 1) with frequent psychogenic vomiting, F50.5; 2) with severe depletion due to prolonged persistent refusal of food with the episodes of induced vomiting to lose weight, F50.0; 3) with bulimia nervosa, F50.2; 4) restriction of food intake without vomiting and normal BMI range, state of remission.

Patients of groups 1 and 2 were severely depleted. There were revealed degenerative changes in the skin, nails, hair; infarction; bradycardia, hypotension, acrocyanosis, disorders of the gastrointestinal tract, amenorrhea, anemia, low body temperature.

Asthenic disorders dominated in the mental status. The presence of euphoria testified to the severity of the condition. The examined group 1 could not eat because of fear of emergence vomiting (vomitophobia) and the smallest portion of food or liquid could trigger vomiting. This group was the most somatically unfavorable in its prognoses as vomiting occurred against the will of the patient, like entrenched, often in childhood, form of stress response.

Patients of the 2nd group continued to adhere the carefully designed diet because of the fear of weight gain. They often could not eat normally due to prolonged fasting that caused pathology of the gastrointestinal tract and obsessive fear of eating, hypochondriacal fixation on pathological sensations from the gastrointestinal tract.

Laboratory studies have identified a marked reduction in the number of free catecholamines in patient's groups 1 and 2 (noradrenaline 0.8=0.1 ng/min, adrenaline 0.5=0.1 ng/min, dopamine 10.1=0.26 ng/min), that coincided with the indicators of severe asthenic depression.

We observed a significant increase in dopamine excretion in group 3 (1147.8=189 ng/min) in the period equivalent to the withdrawal in various addictions, which came to normal values by the 20th day of therapy (169.5=7.5 ng/min). Normalization of these indicators confirmed compliance with the diet, which is diagnostically important in case of dissimulation and persistent attempts to violate the ban on overeating and vomiting.

The study revealed that primary consequences of starvation at initial stage mainly affect the cardiovascular, genitourinary system and the gastrointestinal tract, with the subsequent injury of central nervous system, immune and endocrine systems, locomotor apparatus and organs of hematopoiesis. The obtained data also indicates the active participation of catecholaminergic systems of the brain and its midline structures in the formation of the ED.