CLINICAL SEMIOTICS OF DAMAGE TO THE CARDIOVASCULAR SYSTEM IN IRON DEFICIENCY ANEMIA OF THE II DEGREE IN STUDENTS OF SAMSMU

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Annotation: *Iron deficiency anemia is a common disease that strongly affects the cardiovascular system, especially in medical university students who are constantly under stress. As a result, such students may show various symptoms, including deterioration of their general condition, palpitations, shortness of breath, pale skin, cyanosis of the legs, headache, etc. For diagnosis and treatment, a comprehensive examination is necessary. Early detection and treatment of this disease is extremely important for the health and success of students.*

Keywords: *anemia, students, semiotics, cardiovascular diseases.*

Introduction. Iron deficiency anemia is one of the most common diseases that affects the cardiovascular system. Especially students of Samara State Medical University, who are in a state of constant tension and stress, are at risk of developing this disease. In recent decades, the incidence of iron deficiency anemia (WAIT) has increased significantly, which is more than 50% common among young people of puberty and adolescence.

The purpose of the work. This paper presents the clinical semiotics of the pathology of the cardiovascular system in patients with II degree in 2nd year students of the Faculty of Medicine of the Samarkand Medical Institute. The study included a questionnaire survey, an examination, a physical examination of the heart and tests of red blood indicators.

The results of the study. Anemia was detected in 226 students, according to the degree of severity: I degree in 92 (40.7%), II degree in 116 (51.4%) and III degree in 18 girls (7.9%). We analyzed the clinical semiotics of damage to the cardiovascular system of students with grade II IDA comparing them with grade I. The semiotics of damage to the cardiovascular system included: dizziness, fainting, shortness of breath during exercise, decreased blood pressure and cardialgia. The clinical semiotics of damage to the cardiovascular system in iron deficiency anemia of the II degree in students is characterized by a number of specific symptoms. One of them is a deterioration in the general condition of the patient, manifested in weakness, increased fatigue and decreased performance.

Students experiencing grade II iron deficiency anemia also often complain of palpitations and shortness of breath, even with minor physical exertion. Visually, when examining patients, you can see the pallor of the skin, and sometimes even their ictericity. Patients may experience

cyanosis of the legs, swelling and hyperemia of the face. It is often possible to detect cardiac arrhythmias in patients with grade II iron deficiency anemia - nausea, vomiting and even loss of consciousness. The symptom of dizziness in grade II patients was observed in 86 students (56.6%), whereas in grade I it was detected in 35%.

Often, that is, 3 times more complaints of girls fainting were observed. Moreover, 77 students had fainting attacks 1-3 times a year, mainly during the pre-session period. The main manifestations of the syndrome were its occurrence in the vertical position of students, while staying in a stuffy room. As precursors of fainting, students complained of feeling discomfort, weakness in the legs, nausea, dizziness.

Syncope was more often observed when the hemoglobin level was below 80 g/l, serum iron less than 10 mcg/l, serum ferritin below 8.5 mcg/l (at a norm of 20.10 = 1.03). This is explained by the presence of increased irritability, which can contribute to the occurrence of paroxysms, as well as a significant decrease in the partial pressure of oxygen in the blood of patients at rest.

Shortness of breath during physical activity was detected in 70% of students. In the control group, it was 41%. During the Shalkov clino-orthostatic test (5 deep squats in 10 seconds), a negative result was obtained in 104 students (68.4%). A decrease in blood pressure was 1.5 times more often observed in grade II IDA, mainly of the diastolic component. Changes in blood pressure develop due to circulatory overload of blood vessels. Complaints of pain in the heart (cardialgia), palpitations, and interruptions were observed in half of the patients. Auscultation: against the background of muffled heart tones, systolic noise was heard, occupying the entire systole, the noise was louder in sonority than the I-tone. Most often, the noise is heard above the pulmonary artery. In our opinion, this is due to a decrease in the chronotropic reserve of the heart.

Neurological symptoms are also present in the clinical picture of grade II iron deficiency anemia. Patients may experience headache, dizziness, tinnitus and darkness in front of their eyes. Palpation of the neck arteries can reveal their pulsation.

Conclusions. In general, the clinical semiotics of damage to the cardiovascular system in iron deficiency anemia of the II degree in students of SamSMU is represented by a variety of characteristic symptoms. Early detection and timely treatment of this disease are important aspects for maintaining the health and success of students in their studies. The rapid restoration of hemoglobin to normal values and maintaining it at an optimal level is the main task of a doctor focused on the control and prevention of cardiovascular complications in iron deficiency anemia of the II degree.

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