

**UDC: 616.351-007.253 : 613.165 : 616.34-089****THE RELATIONSHIP BETWEEN INDICATORS OF BODY REACTIVITY AND  
ENDOGENOUS INTOXICATION IN PATIENTS WITH ACUTE ISCHEORECTAL  
PURULENT PARAPRACTITIS.****Karabaev Zhurabek Aminjon ugli**

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**Annotation.** A study of patients with sciatica-rectal paraproctitis in the proctology department against the background of a general stressed adaptive state in the body's reactivity revealed an increase in the MDA/catalase coefficient, an increase in the endogenous intoxication index of MSM254 and a decrease in the protein stability coefficient.

**Keywords.** Reactivity of the body, adaptation, prooxidant, antioxidant, endogenous intoxication, protein stability coefficient.

**Relevance.**

Currently, forecasting and tactics of choosing surgical treatment methods remain one of the urgent problems in surgical proctology [7, 11]. In recent years, the development of industry around the world has contributed to environmental disruption [1]. The latter, in turn, as stressors acting on the human body contribute to the development of adaptive processes [4]. In the process of this kind of reactivity, with prolonged exposure to stressful factors in the body, energy materials are depleted, and, accordingly, the body's adaptive capabilities decrease. A sharp decrease in the reactivity of the body is also facilitated by a decrease in the specific reactivity of the body. We know that the development of destructive changes in the human body plays an important role in reducing the body's resistance. One of these manifestations in the body is acute paraproctitis. In recent years, issues related to the diagnosis and treatment of patients with this pathology have been the subject of worldwide debate [7, 11, 9]. Since this pathology is one of the most common proctological diseases, and its frequency varies from 20 to 40% of all diseases of the rectum [6, 13, 15]. According to some authors, the issues of etiopathology, the development of acute paraproctitis, prognosis and choice of tactics of surgical and antibacterial treatment are very controversial [9, 12, 14]. In this regard, rapid diagnostics of the body's reactivity, pro-oxidant, antioxidant activity of the body and indicators of endogenous intoxication during aerobic infection

in patients with acute paraproctitis for performing initial rehabilitation surgery is an urgent problem.

**The purpose of the study.** To identify the state of the body's reactivity, pro-oxidant, antioxidant activity and indicators of endogenous intoxication, the coefficient of protein stability in pararectal purulent paraproctitis.

**Materials and research methods.** The scientific study was conducted during 2021-2025 in 30 healthy men and 30 patients with acute sciatica at the age of 35-40 years. In the proctology department of the multidisciplinary clinic No. 1 of the Samarkand State Medical University.

The reactivity of the patients' body was determined using the Neurolab Biomish KPF-01b device. Depending on the stress of the system during data processing, four types of functional nosological diagnosis were established. Exactly: 1. Normal (hyperadaptive) or satisfactory adaptive state; 2. Functional stress; 3. excessive stress or unsatisfactory adaptive state; 4. The occurrence of maladaptive state. In each case, the device provides data on the state of the autonomic nervous system and humoral regulation of the body. In addition, the content of MDA, catalase activity, indicators of endogenous intoxication of MSM 254 and MSM 280, and the coefficient of protein stability in the blood were determined. The reliability of the differences in the data obtained was analyzed using the Microsoft Office - Excel 2000 package. The difference between the two compared indicators was assumed to be significant at  $P=0.05$  and  $P<0.05$  using the Student's t-test. The results obtained and their discussion. When examining the heart rate variability index in healthy men, the primary mathematical indicator Amo-mode amplitude was  $37.7\pm 1.1\%$ , the secondary geometric indicator IVR-the index of vegetative equilibrium was  $137.6\pm 7.8$ , and the VPR-the vegetative rhythm index was  $5.3\pm 0.3$ , IN-the stress index of the regulatory system was  $100.5\pm 6.0$  and the spectral In the TR analysis, the triangular index was  $9.6\pm 0.4$ , and the functional state index was  $3.5\pm 0.3$ . At the same time, HF-the relative indicator of the parasympathetic nervous system was  $34.1\pm 0.7\%$ , LF-the relative indicator of the sympathetic nervous system was  $43.2\pm 0.6\%$ , VLF- the relative indicator of humoral regulation was  $22.6\pm 1.0\%$ , LF/HF - centralization of regulatory systems was  $1.26\pm 0.1$ . If the obtained interpret the data with data from other researchers. the reactivity of the body in healthy men is in a state of hyperadaptive reactivity [2]. Against the background of this kind of reactivity of the body in the prooxidant system, the indicator of malondialdehyde in the blood was  $3.6\pm 0.2$  mmol/l, the activity of the antioxidant system was blood catalase  $0.93\pm 0.01$  mmol/s\*L. At the same time, the MDA/catalase coefficient was  $4.1\pm 0.2$  cu, the endogenous intaxification indices MSM254 were  $0.243\pm 0.01$  cu, MSM280 were  $0.250\pm 0.01$ , and the protein stability coefficient was  $1.0\pm 0.04$  cu. If the data obtained are

compared with the data of scientists, then against the background of hyperadaptive reactivity, the indicators of the pro-oxidant, antioxidant system, and indicators of endogenous intoxication are in a balanced state [8, 10]. When examining the heart rate variability index in patients with sciatica-rectal paraproctitis, the primary mathematical indicator Amo-mode amplitude increased to  $54.7 \pm 1.1\%$  ( $P < 0.001$ ), the secondary geometric indicator IVR-index of vegetative equilibrium to  $395.6 \pm 23.3$  ( $P < 0.001$ ), and the VPR-vegetative rhythm index was  $10.9 \pm 0.4$  ( $P < 0.001$ ), the IN-index voltage of the regulatory system was reduced to  $296.5 \pm 11.5$ , and the spectral analysis of the TP-triangular index was reduced to  $7.9 \pm 0.3$ , the index of functional state to  $0.64 \pm 0.1$  ( $P < 0.001$ ). At the same time, HF-the relative indicator of the parasympathetic nervous system was reduced to  $31.1 \pm 0.4\%$  ( $P < 0.001$ ), LF-the relative indicator of the sympathetic nervous system was increased to  $51.8 \pm 0.4\%$  ( $P < 0.001$ ), VLF- the relative humarrhal regulation was reduced to  $17.2 \pm 1.0\%$  ( $P < 0.001$ ), LF/HF - centralization of regulatory systems has been increased to  $1.7 \pm 0.04$  ( $P < 0.001$ ). If the data obtained are interpreted with the data of scientists, then the body's reactivity in healthy men is in a state of intense reactivity [3]. Against the background of this kind of reactivity of the body in the prooxidant system, an increase in the amount of MDA in the blood was revealed to  $4.0 \pm 0.1$  mmol/l ( $P < 0.001$ ), the activity of the antioxidant system-blood catalase was reduced to  $0.87 \pm 0.01$  mmol/s\*1 ( $P < 0.001$ ), while the MDA/catalase coefficient increased to  $4.6 \pm 0.1$  cu, Indicators of endogenous intoxication of MSM254 increased to  $0.296 \pm 0.01$  cu, MSM280 to  $0.269 \pm 0.01$ , protein stability coefficient decreased to  $0.92 \pm 0.02$  cu. If the data obtained are compared with the data of scientists, then against the background of intense reactivity of the body of patients with ischemic paraproctitis, an increase in the MDA/catalase coefficient, endogenous intoxication index, and a decrease in the protein stability coefficient were revealed. Which provided a decrease in the reactivity of the body, the functional state and cell resistance and contributed to the development of a purulent inflammatory process in the pararectal patch of an ischiorectal nature [1, 5], and is a prognostic criterion for determining the severity of acute purulent paraproctitis.

### **Conclusions**

1. In sciatica-rectal paraproctitis, compared with healthy men, the indicators of general reactivity are in a tense adaptive state.

2. Against the background of a tense adaptive state in patients with sciatica-rectal paraproctitis, an increase in the MDA/catalase coefficient, endogenous intoxication of MSM254, and a decrease in the protein stability coefficient were revealed.

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