



### Dynamics of Changes in the Reactivity of the Autonomic Nervous System in the Treatment of Acute Pancreatitis

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**Annotation.** Acute pancreatitis is an acute inflammation of the pancreas, which affects the human body, integrative systems, causing severe changes in the body's reactivity. The purpose of the work is to induce a vegetative reaction in Utkarpancreatitis. The material of the work is the V method. The research was carried out in 30 physiologic health care units and 30 patients with acute pancreatitis. The vegetative reaction was induced with the help of the variability of the heart rhythm. The result obtained was that in patients with acute pancreatitis, there was a surge in the reactivity of the vegetative nervous system, between the sympathetic nervous system and the parasympathetic nervous system, there was an increase in the activation of the sympathoadrenal system, the centralization of the management system, an increase in metabolic reactivity, an increase in the minute volume of the heart in the Conclusion. In the reactivity of the vegetative nervous system in patients with acute pancreatitis, there is a tension between the sympathetic nervous system and the parasympathetic nervous system, the activation of the sympathoadrenal system in the vegetative nervous system, ensuring the centralization of the management system, has hyperadaptive reactivity.

**Key words:** Acute pancreatitis, reactivity of the autonomic nervous system, heart rate variability.

**Relevance.** Pancreatitis is an aseptic inflammation of the pancreas, on the basis of which lies the process of autofermentative necrobiosis, as well as endogenous intoxication, as well as a sharp change in the body's reactivity and endocrine system [19; 13; 8]. This process involves the circumference of the pancreas, the back of the abdominal cavity, the abdominal cavity, as well as the non-abdominal cavity, affecting the organs causing various changes in them. Acute pancreatitis is one of the most common diseases in surgical diseases, it accounts for 5-10% of abdominal pathology. The incidence of pancreanecrosis among common O'neal pancreatitis is 15-30%. In the last 20 years, there has been an increase of 10-30 in 100,000 inhabitants [2; 6; 11; 10; 18; 20].

By now, despite conservative and operative treatment with modern methods, it is observed that the total mortality rate is 7-15%, in destructive cases-40-70%, and in pancreatic shock-85-90%. One of the main factors that determine this condition lies in the patient's age, condition of organ failure syndrome, late diagnosis, misdiagnosis, improper therapeutic and surgical treatment . [12; 14; 5; 4; 3; 7; 17; 21]. This process, lying in the specific course of the disease on the basis of G.early detection of severe acute pancreatitis, in which such causes develop on the basis of mechanisms, the choice of adequate types of treatment, remains one of the main actual problems of treatment.



**The purpose of the work.** Determination of vegetative reactivity in a patient with acute pancreatitis.

**The object of the work** was studied 30 normal physiologically healthy organism conditions, as well as vegetative reactivity in 30 patients with acute pancreatitis during 2018-2021 teshirish RSHTYOIM was carried out in 1 and 2 surgery departments of Samarkand branch.

**Methods of research.** General clinical laboratory methods, instrumental methods (KIG, Ultra sound research with, EGDFS), methods of statistical analysis.

**Research results and analysis.** In turn, it should be said that in people with physiological control, arterial pressure has normal arterial pressure under mixed vegetative reactivity, as well as vascular fullness, blood distribution.

When vegetative reactivity was studied using KIG in physiologically healthy people: according to mathematical analysis, the level of activity of the cardiovascular system showed  $mo -0.78 \pm 0.01$ , and the control activity of the sympathetic nervous system showed  $amo -42.6 \pm 1.9$ . The secondary pointer was-in  $123.7 \pm 15.4$ -the activity of the central office of the heart rhythm on variational pulsometry. The following data on spectral analysis were identified: absolute activity of the office system was equal to Total -  $703.4 \pm 91.4$ , while the proportional activity of the metabolic-humoral and sympathetic nervous system was VLF  $-231.2 \pm 31.6$ , while the absolute activity balance of the sympathetic nervous system and parasympathetic nervous system was equal to LF/HF  $-1.53 \pm 0.3$ . In them, the maximum arterial pressure is on average  $122.2 \pm 16.5$  mm.sm column, while minimum arterial pressure is  $79.6 \pm 7.4$  mm.sm having made up the column. And the pulse pressure is  $42.6 \pm 3.4$  mm.sm he organized his column.

When vegetative reactivity is studied under the variableness of the heart in patients after the diagnosis of acute pancreatitis.

In the mathematical analysis of rhythm, it was observed that  $amo$  increased to  $64.5 \pm 1.8\%$ , and in the analysis of the variational pulsometry pointer, the mathematical equilibrium index IVR increased to  $295.7 \pm 36.17\%/s$  ( $R < 0.001$ ), at which time the control system strain index in  $257.6 \pm 30.4$  ( $\%/s^2$ ) ( $r < 0.001$ ) was observed to increase protective control reactivity was observed in these patients.

In the spectral indicator analysis, VLF- $351.3 \pm 46.5$  ( $MS^2$ ) ( $R < 0.001$ ) under the metabolic hyperadaptive protective adaptation process in these patients, LF/HF was  $3.9 \pm 1.2$  ( $R < 0.001$ ), under the excitation of Alpha and beta adrenoreceptors in the blood vessels under the sympathoadrenal system, an increase in arterial pressure, and a minute-volume of the heart. In them, the maximum arterial pressure at this time was  $131.3 \pm 0.9$  mm.CM.ust ( $R < 0.001$ ). UST. ( $R < 0.8 \pm 0.8$  mm.CM. ust. ( $R < 0.001$ )) while the pulse pressure was  $44.4 \pm 0.25$  mm.ust. ( $R < 0.001$ ).

In turn, attention is paid to the data obtained in patients with acute pancreatitis substance amplitude according to mathematical analysis-if the reactivity in the  $amo$  pointer is visibly shifted towards the side of the reactivity of the sympathetic nervous system ( $R < 0,001$ ), the activity of the central office of the heart rhythm on variational pulsometry in at this time is under- Under the hyperadaptive protective adaptation process in these patients, LF/HF was  $3.9 \pm 1.2$  ( $R < 0.001$ ), an increase in arterial pressure under the excitation of Alpha and beta adrenoreceptors in the blood vessels under the sympathoadrenal system, an increase in cardiac minute volume and blood centralization were observed. In them, the maximum arterial pressure at this time was  $145.3 \pm 0.9$  mm.CM.ust ( $R < 0.001$ ). UST. ( $R < 0.8 \pm 0.8$  mm.CM. ust. ( $R < 0.001$ )) while the pulse pressure was  $52.4 \pm 0.25$  mm.ust. ( $R < 0.001$ ).

Thus, in physiologically healthy people, as well as in patients with acute pancreatitis, their general recativeness is studied, which includes data obtained on the basis of a mathematical analysis of the heart rhythm in the variability of the heart rhythm, variational pulsometry, spectral analysis Mikhailov V.M. (2000) Baevsky R.M., (1999y) Fleishman A.N., (1999), Haspeka, And N.B., (1996), Savelev V. When analyzed on the basis of data from V (2016), there is a monotonous tension between the sympathetic nervous system and the parasympathetic nervous system in Vegetative reactivity in the body of controlled people, the norm is under the organization of adaptive reactivity, arterial pressure has normal arterial pressure, as well as vascular fullness, distribution of blood, forming normadaptive reactivity bulsa, in patients with acute pancreatitis, there is a tension between the sympathetic nervous system and the parasympathetic nervous system in the reactivity of the autonomic nervous system, activation of the



sympathoadrenal system in the autonomic nervous system, centralization of the control system, under an increase in the minute volume of the heart in the cardiovascular system, indicating the centralization of blood,

### Conclusion.

1. In physiologically healthy people, in the body of controlled people, in Vegetative reactivity, there is a monotonous tension between the sympathetic nervous system and the parasympathetic nervous system, the norm is adaptive reactivity.
2. In patients with acute pancreatitis, there is a tension between the sympathetic nervous system and the parasympathetic nervous system in the reactivity of the autonomic nervous system, the activation of the sympathoadrenal system in the autonomic nervous system, ensuring the centralization of the control system, has hyperadaptive reactivity.

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