

Clinical course and approaches to the therapy of chronic pancreatitis in patients with comorbid pathology

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Key words: chronic pancreatitis, comorbid pathology of the cardiovascular system, quality of life, treatment, enzyme replacement therapy

In everyday practice, the selection of a treatment regimen for patients with combined pathology of various organs and systems is often a complex task. Simultaneous appointments of different specialists in accordance with the current standards of treatment for a particular disease can lead to polypharmacy, which leads to side effects of drugs, antagonism of their effects and, as a result, the progression of symptoms. In many cases, this is accompanied by a patient's failure to receive therapy.

Chronic pancreatitis (CP) is one of the frequent diseases that are diagnosed in patients with combined pathology. At present, Russia has been a significant increase in the number of patients with CP [1]. The main reasons for this are poor-quality nutrition with an excessive amount of roast, smoked, fat, bad habits, side effects of the therapy. At the same time retain their value as a trigger or exacerbating factor gallstone disease, liver and the duodenum (duodenal), infectious diseases, chronic pathology Background [1, 2].

Adverse effects on the pancreas have, as is well known, excessive alcohol consumption and smoking, increase the risk of pancreatitis in 8-17 times [7, 8]. Among the drugs frequently used by patients (both independently and by prescription), leading to pancreatic damage, the first places are occupied by thiazide diuretics, furosemide, estrogens, metronidazole, isoniazid, ciprofloxacin, sulfanilamides, angiotensin converting enzyme inhibitors, acetylsalicylic acid, codeine [6, 9]. In particular risk of developing drug fall pancreatitis patients receiving therapy with cytostatics and corticosteroids [4]. The likelihood of complications increases with an overdose of drugs, including vitamin D, calcium. The risk of developing pancreatitis is often due to a hereditarily determined deficiency of certain enzymes involved in the metabolism of the relevant substances.

Different heart and vascular disease: myocardial infarction and myocardial infarction, atrial fibrillation, myocarditis, cardiomyopathy, atherosclerosis, vasculitis lead to insufficient blood flow to the pancreas, which is also accompanied by atrophic and dystrophic changes with its secretory insufficiency [5]. Various factors, often noted in patients with combined pathology, exert a mutually exacerbating effect. Typical cases of acute pancreatitis (PI) or exacerbation of CP are characterized by

intense shingles in the abdomen, nausea, vomiting, unformed frequent sticky stools with a strong odor. With chronic course of the complaint, indistinct, often dizziness, palpitations worse after eating. During the day, patients are concerned about rapid fatigue, irritability, poor appetite, aversion to fatty foods. Symptoms intensify with the use of fatty foods, fried, alcoholic. KP Symptoms are often non-specific, long regarded as a manifestation of other diseases, at the same time without the correct timely treatment can lead to diabetes, pancreatic metaplasia and death [3, 9].

With palpation, in some patients, soreness in the left hypochondrium, epigastric region can be revealed. In koprologicheskom analysis note steatoroyu, amylorea, creator, increasing the level of elastase-1. In the analysis of blood there may be signs of anemia, hypoproteinemia. Levels of α -amylase and lipase in the blood serum increase only with OP or severe exacerbation of CP.

To assess the status of the pancreas to date, the most informative of the widely available methods is ultrasound (ultrasound).

The basis of treatment of CP is the diet and substitution enzyme therapy. Enzyme preparations improve the condition of patients, removing or significantly reducing pain syndrome and other manifestations of the disease, promote digestion of food. If they get into the DPC, they inactivate the cholecystokinin-releasing factor, which increases the level of cholecystokinin-2 in the blood. As a result, the secretory activity of the pancreas and intra-cellular pressure decrease, the puffiness and autolysis of the cells decrease.

Currently, a large number of enzyme preparations are used in clinical practice, characterized by a different combination of components, enzyme activity, production method and form of production. When choosing an enzyme preparation in each case, the physician should pay attention to its composition, activity of components and form. Proven efficacy with a minimum of side effects in the treatment of CP possess drugs based on pancreatic enzymes of animal origin. They can be used as a permanent, as replacement therapy, and once, in violation of diet. The dose is selected individually. The lack of effect can be associated with both an insufficient effective dose and inactivation of active substances in the stomach. In view of this, the drug prescribed for substitution enzyme therapy must have acid-fast protection, while at the same time it is easy and quick to distribute it in the volume of food. These requirements are met by pancreatin, which consists of mini-microspheres encapsulated in a gelatin capsule containing amylase, lipase, and protease coated with an enteric-coated membrane.

The purpose of research - to assess the impact of substitution fermentoterapii on the quality of life in patients with CP on the background of comorbidity.

Patients and methods. The study included 68 patients aged 48 to 99 years, of whom 39 were women, 29 men were outpatient and treated for CP in combination with other pathologies. The diagnosis was made on the basis of complaints, anamnesis, clinical examination, results of coprologic analysis and ultrasound data, which was performed with the ACCUVIX XQ scanner (MEDISON, Korea). Patients underwent a laboratory examination with evaluation of clinical and biochemical blood analysis, electrocardiography, and, if necessary, daily monitoring of the electrocardiogram.

Among the concomitant diseases of the cardiovascular system, hypertensive disease of the 1st degree was noted in 8 patients (12%), the 2nd degree in 21 (31%), the third degree in 39 (57%); Ischemic heart disease - in 66 (97%), including postinfarction cardiosclerosis - in 32 (47%), angina in 34 (50%); Atrial fibrillation - in 22 (32%), including a constant form - in 15 (22%). Of the pathology of other organs, chronic obstructive pulmonary disease was recorded in 29 (43%), chronic gastritis in 57 (84%), chronic duodenitis in 35 (51%), chronic cholecystitis in 51 (75%), cholelithiasis - 21 (31%), including a state after cholecystectomy - in 12 (18%), chronic renal failure - in 22 (32%), osteochondrosis - in 66 (97%), including radiculitis - in 58 (85%). Diabetes mellitus was diagnosed in 28 patients (41%). Among the patients of smokers there were 36 (53%), regularly violating the recommendations on diet therapy - 27 (40%). According to the diagnoses, patients received standard treatment and diet therapy, according to the recommendations.

To assess the effectiveness of enzyme therapy, patients were divided into 2 groups. The main group included 36 patients who received pancreatin at a dose of 10 thousand units. 3 rubles / day during meals. The comparison group included 32 patients who did not receive enzymes (12 patients) or took other enzyme preparations (20 patients). Comparable groups were comparable among themselves in terms of age and gender composition, peculiarities of the course of CP and other pathology, and basic therapy. The results of treatment were assessed on a repeat examination for 30 ± 4 days.

The statistical processing of the results was carried out with the help of the program Statistica 6.1 with the calculation of the Z-criterion. Differences were considered valid for $p < 0.05$.

Results. In the majority of patients, non-specific complaints predominated for general weakness, dizziness, palpitations, and irregular heartbeats (Table 1). Less often noted nausea, abdominal pain, frequent unformed stool up to 4 r. / Day. In an objective examination on electrocardiograms or the results of daily Holter monitoring, 58 patients (86%) had ventricular or supraventricular extrasystole, episodes of sinus, and sometimes supraventricular tachycardia and bradycardia or arrhythmia. In 18 (26%) patients, the therapy with β -blockers and antiarrhythmics

was ineffective. After 1 month. After treatment in the main group receiving pancreatin, significantly less noted as characteristic for pancreatitis complaints (pain in the epigastrium, nausea), and uncharacteristic: weakness, dizziness, palpitations and irregularities in the heart, hypotension. With the preservation of the symptoms, the majority of patients on the background of treatment with pancreatin noted improvement in well-being, while in the comparison group the positive effect of therapy was observed in less than half of cases.

Симптомы	Основная группа (на фоне приема панкреатина), n=36 (100%)		Группа сравнения (без ферментотерапии или на фоне приема других препаратов), n=32 (100%)	
	До лечения, абс. (%)	После лечения, абс. (%)	До лечения, абс. (%)	После лечения, абс. (%)
Боли в эпигастрии после еды	8 (22)	0*	6 (19)	3 (9)
Дискомфорт в животе, урчание, метеоризм	16 (44)	6 (17)	15 (47)	10 (31)
Отрыжка	21 (58)	14 (39)	22 (69)	17 (53)
Тошнота	11 (31)	2 (6)*	11 (34)	7 (22)
Рвота	2 (6)	0	1 (3)	0
Частый жидкий стул	13 (36)	2 (6)	10 (31)	3 (9)
Слабость, усиливающаяся после еды	27 (75)	3 (8)*	25 (78)	14 (44)
Головокружения, усиливающиеся после еды	21 (58)	4 (11)*	23 (72)	12 (38)
Сердцебиения, перебои в работе сердца, усиливающиеся после еды	31 (86)	5 (14)*	26 (81)	20 (63)
Гипотония после еды	24 (67)	2 (6)*	18 (56)	13 (41)
Улучшение самочувствия	–	34 (94)*	–	15 (47)

Примечание: * – достоверные различия с группой сравнения при $p < 0,05$

Патологические изменения		Основная группа (на фоне приема панкреатина), n=36 (100%)		Группа сравнения (без ферментотерапии или на фоне приема других препаратов), n=32 (100%)	
		До лечения, абс. (%)	После лечения, абс. (%)	До лечения, абс. (%)	После лечения, абс. (%)
Клинический анализ крови	Гипохромная анемия	30 (83)	13 (36)	26 (81)	16 (50)
	Стеаторея	36 (100)	28 (78)	32 (100)	27 (84)
Копрологический анализ	Амилорея	36 (100)	29 (81)	32 (100)	28 (88)
	Креаторея	29 (81)	26 (72)	30 (94)	27 (84)
УЗИ	Диффузные изменения	36 (100)	36 (100)	32 (100)	32 (100)
	Увеличение размеров	11 (31)	0*	8 (25)	4 (12)

Примечание: * – достоверные различия с группой сравнения при $p < 0,05$

According to laboratory research and ultrasound, normalization of pancreatic size was registered more often in the main group (Table 2). Electrocardiography and day-to-day Holter monitoring in the main group showed a pronounced positive dynamics in 26 patients (72%), while in the comparison group - in 6 (19%).

Discussion. The study included patients with CP in combination with a variety of chronic pathologies. The pain syndrome was not of intensive girdling character, which corresponded to the diagnosis. More often patients were disturbed by local morbidity in the epigastric region, a feeling of heaviness or discomfort after eating, rumbling in the stomach, flatulence. Patients noted episodes of eructation, nausea, sometimes vomiting, unstable copious sticky stool with a pronounced odor. However, apparently, with the recommended diet, a small

amount of food consumed in a significant number of patients with typical symptoms was not noted.

Often the main complaints of patients were weakness, worse after eating, dizziness, palpitations and irregular heartbeats. When measuring blood pressure, hypotension was noted. With these complaints, patients, as a rule, turned to the cardiologist and neurologist. At the same time, standard antiarrhythmic therapy did not give a stable positive result, but complaints of discomfort or pain in the abdomen, nausea, and stool disorders appeared or intensified. Apparently, the peculiarities of the patients' condition were associated with pathological changes not only in the pancreas, but also in the stomach, PDC, hepatobiliary and cardiovascular systems. The pronounced positive effect on the background of the use of pancreatin was due to the action of a complex of components on the digestive process with no side effects.

Thus, fermentotherapy of CP in patients with combined pathology contributes to the improvement of the quality of life by eliminating both typical and nonspecific symptoms: weakness, dizziness, palpitations and irregular heartbeats. The positive dynamics is confirmed by the results of objective research. Pancreatin is recommended as a drug of choice for patients with combined pathology.

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The features of pathogenesis, clinical course and diagnostics of chronic pancreatitis combined with diseases of the cardiovascular system are discussed in the article. Results of the author's own research on the effectiveness of influence of enzyme replacement therapy on the course of pancreatitis and comorbid pathology are presented. Significant positive dynamics of both manifestations of chronic pancreatitis and cardiovascular diseases, laboratory and instrumental examinations, improvement of patients' quality of life upon the prescription of pancreatin are noted.