



Chronic Pancreatitis Clinical, Laboratory, Instrumental Diagnostics

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Abstract: This article presents current information on clinical manifestations, treatment of patients with chronic pancreatitis and clinical, laboratory, instrumental diagnostics.

Key words: clinical manifestations, chronic pancreatitis, diagnosis, method, treatment.

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INTRODUCTION

Chronic pancreatitis is a group of diseases (variants of chronic pancreatitis), which are characterized by various etiological factors, the presence of focal necrosis in the pancreas against the background of segmental fibrosis, and the development of varying degrees of severe functional insufficiency [1]. The progression of chronic pancreatitis leads to the appearance and development of atrophy of the glandular tissue, fibrosis and replacement of the cellular elements of the pancreatic parenchyma with connective tissue. In recent publications, the views of some researchers on the stages of the course (progression) of chronic pancreatitis are given. One of them [2] considers the initial period of the disease, the stage of exocrine (exocrine) pancreatic insufficiency and a complicated variant of the course of chronic pancreatitis, tumors of this organ. However, apparently, other variants of the course of chronic pancreatitis are also possible.

MATERIALS AND METHODS

Analysis of medical documents of patients referred from outpatient clinics to a hospital for further examination and treatment with a referral diagnosis of pancreatitis (exacerbation of chronic pancreatitis), and case histories of patients who, as a result of the examination, were diagnosed with exacerbation as the main chronic pancreatitis, showed that often these diagnoses are not true. We found that in some cases there were no data indicating the presence of chronic pancreatitis at all (according to the analysis of documents sent from outpatient clinics); in other cases, chronic pancreatitis was observed in remission, and the main disease that forced patients to seek medical help, as shown by the survey, was an exacerbation of peptic ulcer, exacerbation of chronic gastritis, reflux

esophagitis or other diseases, the study combinations of which with chronic pancreatitis are devoted to only a few studies [3, 4].

An analysis of the results of examining patients with pancreatic diseases showed that even today, despite the emergence of new methods of examination, a thorough clarification of patient complaints and anamnesis of the disease, as well as a physical examination of patients, remain the most important part of the initial examination, on which first of all, the choice of the most important methods of laboratory and instrumental examination in each specific case, the identification or exclusion of chronic pancreatitis, as well as possible underlying or concomitant diseases.

The main symptoms of exacerbation of chronic pancreatitis are more or less pronounced (sometimes severe in intensity) attacks of pain, localized most often in the left hypochondrium and / or in the epigastric region, associated or not associated with food intake, often occurring after eating, various dyspeptic disorders, including flatulence, the appearance of malabsorption with the onset of steatorrhea, later and with a decrease in body weight. At the same time, various symptoms, including the frequency of their occurrence and intensity, considered as possible signs of chronic pancreatitis, are not always combined with each other.

RESULTS AND DISCUSSION

In principle, the following methods are generally recommended for diagnosing exacerbations and possible complications of chronic pancreatitis.

1. In order to determine the activity of the inflammatory process in the pancreas: determination of the levels of amylase, lipase, elastase test (ELISA method), various so-called "inflammatory" cytokines (interleukins I, II, 6 and 8, tumor necrosis factor [TNF- α], platelet activating factor [PAF], etc.).
2. In order to determine the state of exocrine pancreatic insufficiency: analysis of clinical data on the assessment of the amount (volume) of feces excreted by patients, determination of the presence/absence of steatorrhea and creatorrhea; assessment of indicators of laboratory tests secretin - pancreozymin test (cerulein), bentyramine test (PABA-test), scatological test (determination of coastase-1) using monoclonal antibodies, Lund test.
3. In order to identify an organic lesion of the pancreas and nearby organs - instrumental methods: plain radiography, ultrasound (ultrasound), computed tomography (CT), esophagogastroduodenoscopy with endoscopic pancreatocholangiography, radionuclide cholecystography and / or intravenous cholangiography.
4. Additionally, in order to detect pancreatic tumors, the study of tumor markers (CA 19-9, EEA), targeted laparoscopic or surgical (open) so-called fine needle biopsy.

The question arises about the availability of using some of the listed methods in a diagnostic examination. It is clear that some of the above methods can be applied only in specialized hospitals. However, is it always necessary to use all these methods in the examination of patients when there is a suspicion of exacerbation of chronic pancreatitis (including in order to exclude or identify chronic pancreatitis in remission) and its complications? Obviously, in the practice of examining patients, one should first of all use those methods that are available in a particular medical institution. In doubtful cases, it is necessary to refer patients to specialized hospitals.

The main clinical symptoms that are considered characteristic of exocrine pancreatic insufficiency are various dyspeptic disorders, including flatulence, pain that occurs more often in the upper abdomen, weight loss, and steatorrhea. When assessing the level of amylase, it should be taken into account that the level of amylase increases at the beginning of an exacerbation of chronic pancreatitis, reaching a

maximum by the end of the first day, on the 2nd–3rd–4th day the level of amylase decreases, and on the 4th–5th day it normalizes. A "cross" of amylase and lipase levels is possible - a decrease in the first with an increase in the second. In contrast to the level of amylase, the level of lipase often increases from the end of 4–5 days and remains elevated for about 10–13 days, then decreases.

Exocrine pancreatic insufficiency, as is known, arises and progresses due to impaired hydrolysis of proteins, fats and carbohydrates by pancreatic enzymes in the duodenal lumen. Therefore, it is important to evaluate the appearance of feces, its consistency, color and volume in a timely manner. Often, the first signs of the appearance of exocrine pancreatic insufficiency can be judged only by the data of a microscopic examination of the feces of patients. In the presence of exocrine pancreatic insufficiency in the feces, signs of digestive disorders (steatorrhea, creatorrhea, amylopoorrhea) can be detected.

It is known that steatorrhea (the appearance in the feces of a significant amount of undigested triglycerides due to insufficient intake of lipase into the duodenum) occurs when the secretion of pancreatic lipase is below 10% compared to the norm. However, in some patients, the appearance of clinical symptoms is possible even with a significantly lower level of lipase secretion (15–20%), which significantly depends on the composition of food, its volume and other factors, including treatment with certain medications, as well as the possible presence of "extra-pancreatic" disease in some patients. At the same time, an increase in the volume of feces is noted, the latter becomes soft (liquid), due to the appearance of fatty inclusions, the feces acquire a whitish-white color (sometimes it becomes shiny). When flushing feces with water, a greasy stain remains on the bottom of the toilet.

Treatment of patients with chronic pancreatitis largely depends on the severity of its exacerbation (including the presence or absence of various complications), which manifests itself in various, more or less pronounced symptoms in the form of pain, dyspeptic, hypoglycemic, so-called metabolic disorders. - personal and / or icteric variants, however, it is often not possible to accurately identify one or another clinical variant.

The main approach to the treatment of patients with chronic pancreatitis is to carry out, if necessary, the following therapeutic measures: 1) elimination of pain and dyspeptic disorders, including clinical manifestations of exocrine and intrasecretory pancreatic insufficiency; 2) elimination of inflammatory changes in the pancreas and concomitant lesions of other organs, which contributes to the prevention of complications;

3) therapy of complications requiring surgical treatment (performing the necessary operation); 4) prevention of complications and rehabilitation of patients; 5) improving the quality of life. The actual occurrence of complications of chronic pancreatitis largely determines, as the disease progresses, and often significantly increases the clinical manifestations of chronic pancreatitis.

With a pronounced exacerbation, as is known, in the first 2–3 days, patients are recommended to refrain from eating, take bicarbonate-chloride waters (Borjomi and some others) 200–250 ml up to 5–7 times a day (in order to inhibition of pancreatic juice secretion). In the future, it is advisable to use the food developed for the 5th table. If necessary, agents intended for enteral and parenteral nutrition are used. Only with severe gastro- and duodenostasis, continuous aspiration of the contents of the stomach is carried out through a thin rubber probe. As the condition of patients improves, nutrition gradually expands (up to 4-5 times a day), first of all, the amount of proteins increases. Patients are not recommended to eat fatty and spicy foods, sour varieties of apples and fruit juices, alcoholic and carbonated drinks, as well as foods that promote flatulence or increase it.

CONCLUSION

It should be noted that with the progression of chronic pancreatitis with exocrine pancreatic insufficiency, its intrasecretory insufficiency may gradually appear. Factors such as malnutrition, including protein deficiency, which directly or indirectly damage the pancreas, can also affect its endocrine part [4]. This is explained by the fact that the exocrine and intrasecretory parts of the pancreas are closely interconnected and mutually influence each other during the life of this entire organ.

In the treatment of endocrine disorders that occur in some patients with chronic pancreatitis, it is necessary to take into account the likelihood of hypoglycemia and caloric insufficiency, which indicates the inadvisability of restricting the diet of patients with carbohydrates. It must also be remembered that the use of alcoholic beverages increases the likelihood of developing hypoglycemia, which must be taken into account when choosing insulin doses.

REFERENCES

1. Vasiliev Yu. V., Churikova A. A. Chronic pancreatitis, gastric and duodenal ulcers (questions for reflection) // *Clinical-epidemiological and ethno-ecological problems of diseases of the digestive system.*- Abakan, 2014.- P. 66–70.
2. Klemenov V. I. *Clinical gastroenterology.*— Nizhny Novgorod, 2013.— 119 p.
3. Zadionchenko V. S., Koltsov P. A., Livandovsky Yu. A. *Treatment of internal diseases in outpatient practice* // M.: MedExpertPress, Petrozavodsk: IntelTek, 2013.— 542 p.
4. Артыкбаева, З. А. (2015). Методика обучения решению геометрических задач. *Актуальные проблемы гуманитарных и естественных наук*, (2-2), 59-63.
5. Allayarovna, A. Z. (2022). Using a Competency-Based Approach to Conducting Circle Classes in Mathematics Lessons. *CENTRAL ASIAN JOURNAL OF MATHEMATICAL THEORY AND COMPUTER SCIENCES*, 3(5), 57-60.
6. Artikbayeva, Z. A., & Egamova, G. A. (2022). Boshlang 'ich sinf ona tili darsliklarida so 'z birikmasi yuzasidan berilgan bilimlar tahlili. *Science and Education*, 3(2), 734-739.
7. Алиева, К. К., Ахмедова, Н. А., & Ташпулатова, М. М. (2021). ИММУННЫЕ НАРУШЕНИЯ ПРИ СИСТЕМНОЙ СКЛЕРОДЕРМИИ. In *ДНИ РЕВМАТОЛОГИИ В САНКТ-ПЕТЕРБУРГЕ-2021* (pp. 10-10).
8. Ахмедова, Н. А., & Темирова, М. Б. (2022). Влияние микробиоценоза кишечника на клиническое течение хронического панкреатита и его коррекция (Doctoral dissertation, Ташкент).
9. Касимова, М. Б., Ахмедова, Н. А., Махаматходжаева, Х. Б., Шарапов, З., Худойназаров, А., & Кадирова, Ш. (2022). Erap-1 and il-23r as a leading genetic predictors of development of ankylosing spondyloarthritis.
10. Ахмедова, Н. А., Нурмухамедова, Н. С., & Алиева, К. К. (2022). Ведение больных бронхиальной астмой в сочетании с ишемической болезнью сердца.
11. Алиева, К. К., Ахмедова, Н. А., & Арипов, Ш. Ш. (2022). Прогнозирование риска переломов у женщин фертильного возраста с ревматоидным артритом (Doctoral dissertation, Санкт-Петербург).
12. Ахмедова, Н. А. (2022). The role of genes regulating inflammatory mediators in the etiopathogenesis of chronic pancreatitis.