Chronic pancreatitis after cholecystectomy: features of medical tactics

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Key words: chronic pancreatitis, cholecystectomy, sphincter Oddi's dysfunction, post-cholecystectomy syndrome, cholelithiasis, treatment

Treatment of chronic pancreatitis (CP) is important because CP has become the most common disease in the population of the pancreas (pancreas). Over the past 30 years worldwide, an increase incidence of acute pancreatitis (AP) and CP more than 2 times the prevalence of diseases Pancreas among adults over the past 10 years has increased 3 times and adolescents — more than 4 times [13].

According to data, we world statistics, the incidence of gallstone disease (GSD), which is a frequent cause of CP tends to increase among children and among people of middle and old age, increases as the number holetsystektomiy (CE). Each year they performed the world's more than 2.5 million, ie frequency performance of this surgery is second only appendicostomy. However, surgery does not always solve the problem of improving the health of patients: 20-30% continue to complain about poor health. In addition, during the operation itself of lead to various disorders of the digestive system [19]. According to data of literature sources, after discharge from hospital almost every second patient in need of rehabilitation and AP continued treatment, which increases the economic costs, makes difficult the recovery process and further changes the quality of life of patients.

After CE is stored or developing violation bile formation and biliary excretion, secrets stance pancreas tool that can lead to violation of the digestion and absorption. It is believed that "We made timely indications for CE planned in terms of highly qualified surgical hospital leads to complete healing and rehabilitation and quality of life in most patients" [11]. In this regard, to date, it is believed that a patient who underwent CE not require further her medication therapy and removal of the gall bladder (GB) automatically eliminate factors that contribute to the development and progression of the disease. But unfortunately this is not so. According to different authors, after CE gastrointestinal complaints character occurring in the 5 — 40% 3 — 48% even in 74.3% of patients. After CE only 46% note the improvement of health, the lack of change indicate 25% of patients, the deterioration — 29% of patients in recovery attacks and abdominal pain complain about one third of patients [17]. After CE reduced quality of life [1], although some studies have shown improvement. The issue mentioned in the forecast CE patients with GSD and CP remains controversial and needs further study. Very important is the issue of determining the peculiarities of such patients.

Treatment of patients with CP after undergoing general and in particular the CE measures depends on the exacerbation of the disease, presence and pain, dyspepsia and syndromes of exocrine and endocrine insufficiency.

The main approaches to the treatment of patients with CP are:

1) elimination of pain and dyspeptic disorders, including clinical manifestations outwardly — and internal secretion insufficiency pancreas;

2) elimination of inflammatory changes in pancreas and related damage other organs;

3) therapy complications requiring surgical intervention;

4) prevention of complications and rehabilitation of patients;

5) quality of life.

Conservative treatment should be directed at correcting functional and structural defects that existed prior to the transaction have evolved as a result of surgery. Treatment should the compensation wool GB absence, benefits and you of the digestive system to adapt to new conditions. The goal of treatment is to restore normal fasting bile and pancreatic secretions of the biliary and pancreatic ducts along the duodenum (duodenum). In patients with CP after clinical CE may be associated with a mine chemical composition of bile, a violation of its passage in the duodenum, sphincter Oddi's dysfunction (SO), the development of bacterial overgrowth in the gut. Thiscorrection of these disorders is the main task treatment.

An important role in the treatment of patients with CP diet plays. Established that the premature start loading food contributes to early relapse. Adverse effects of oral food load in terms of early onset associated with stimulation of exocrine pancreatic secretion in pancreatic ducts compressed edema and recurrent lesions enzyme as edema and necrosis of acinar cells parenchyma pancreas. Basic principle th diet of patients with CP [18] in the first 1 — 2 days from the beginning of aggravation — hunger. For this purpose, prohibited eating to reduce the secretion pancreas. Amid therapy for improving the general condition of the patient can be transferred to a limited initially, and later to a full oral diet. Thus are the basic principles of diet therapy of patients with CP — food should be mechanically and chemically gentle, low-calorie, contain normal physiological protein (30% with the inclusion of animal protein). Excluded foods that cause bloating, containing crude fiber, rich in extractive substances stimulate the secretion of digestive juices tion. In Xu meals prepared in boiled, steamed, liquid or semi-liquid konsysten tion. Diet and Dr. bnyy — 5 — 6 times a day.

Recently, many scientists, gastroenterologists do not recommend refer to established guidelines AM I. Pevzner year of medical nutrition. However, in our opinion, these classic many valuable recommendations that did not lost relevance. So w ith the improvement of the patient with CP it should translate into food type before th option №5p diet for M. I. Pevzner et al. Limit stimulants of pancreatic secretion, salt and 8 — 10 grams per day, fat 40 — 60 grams per day of carbohydrates to 200 g per day, excluding broth, extractives, spices, fried, smoked foods, onions, garlic, solid tea and coffee [6]. The main way a stable flow of remission is careful adherence to a dietary regime. Food should contain increased amounts of protein — 120 — 140 g/day is recommended to reduce the amount of fat. The diet of patients in remission include basically the same products in acute, but meals may be less gentle. The food is prepared in the form of mashed, steamed or baked in the oven. Patients are not recommended to use fatty and spicy foods, acidic varieties of apples and fruit juices, alcoholic and soft drinks, as well as products that promote the appearance of bloating or reinforce it. In the complex treatment of pain in CP patients requires a strict diet, exclusion of alcohol and

tobacco, carbonated beverages, smoked, fried and fatty foods, condiments, as they may cause spasm of SO.

Depending on the health and condition of the patient for the treatment of CP using various drugs, agents that reduce the secretion of pancreas, often antacids (Maalox, Almagel, etc.). H_2-antagonists — histamine receptors (Kvamatel, hastrosydyn et al.); proton pump inhibitors (omeprazole, rabeprazole, esomeprazole, etc.) anticholinergics (gastrotsepin, atropine, and platifillin etc.). enzymes; agents that inhibit the activity of pancreatic enzymes (kontrikal, hordoks); spazmolity K (no-spa, dyuspatalin); prokinetic (Motilium, tserukal et al.); bezbolyu of onshore facilities (baralgin, NSAIDs, etc.); antibiotics; plasma substituting solutions (glucose 5 — 10% reopolyglukine etc.) [4].

The main reason of pain at CP is hypertension in the ductal system pancreas. Therefore pain can be eliminated measures aimed at reducing the pressure in the ducts, reduce edema and inflammatory infiltration pancreas, without the use of analgesics. To reduce the secretion Pancreas prescribed ranitidine, famotidine, omeprazole, octreotide. It is advisable to start with octreotide 100 mcg 3, the basics of daily subcutaneously. The average course of treatment is 5 days. With little clinical effect daily dose can be increased to 600 mg. At the same time patients showed destination blockers of gastric secretion parenterally within 3 — 5 days, then — orally to restore structural and functional activity of pancreas. Showing antacids with high acid-neytralizu onshore activity every 2 — 3 hours. [5]. It is worth to note that biliary hypertension and inflammation reduce the supply of drugs in the lesion. In this regard heparinization of LMWH by improving microcirculation increases the effectiveness of therapy.

T o prevent formation of biliary sludge need to reduce the amount in the diet of foods containing cholesterol (animal fats) and fatty acids (fried foods). The drug renews correspondent and biochemical composition of bile, its physical and chemical properties, reduces its lithogenicity is ursodeoxycholic acid ("Ursofalk"). Acceptance of the drug at a dose of 5 — 10 mg/kg/day is shown not only in the municipal economy, but after CE for in ofilaktyky recurrence of cholelithiasis. [7] Long-term therapy "Ursofalkom" warns 75% of the development of idiopathic recurrent pancreatitis attacks, which in most cases is caused by miliary sludge. After CE "Ursofalk" should be taken within 6 months. You can use either "Henofalk" or "Ursofalk", or a combination (level of evidence A). "Henofalk" taken at a dose of 15 mg/kg/day before bed, drinking liquid.You can use a combination of "Heno Falk" 7 — 8 mg/kg/day with "Ursofalk" a dose 7 — 8 mg/kg/day once in the evening, drinking liquid. This treatment allows for dissolution of cholesterol stones in 70 — 90% of patients.

Drug treatment of dyskinesia SO aimed at removing muscle spasm chap days are the last. For this purpose, use the following drugs: drotaverine (no-spa), Gal and adults. However, these drugs are nonselective with regard to SO, have many adverse effects caused by the action on the smooth muscles of blood vessels, the urinary system and all parts of the digestive tract. With selective antispasmodic used as gastrotsepin with nonselective — drugs belladonna, platifillin, metacin, but when taking drugs of this group there is a broad range of side effects: dry mouth,

urinary retention, constipation, increased intraocular pressure, drowsiness. also among antispasmodic s taking calcium channel blockers (nifedipine, amlodipine, verapamil), but they have multiple cardiovascular effects, primarily vasodilatation, and therefore not widely used in the treatment of dyskinesia C A.The most effective myotropic selective antispasmodic with a direct action — "Duspatalin" (mebeverin) — its plentiful relaxation selectivity with regard to SO 20 — 40 times greater than the effect of papaverine. K RIM addition, the drug does not cause undesirable hypotension intestine. The drug is taken 1 capsule twice a day before meals (200 mg mebeverinhydrochloride in the form of micro spheres coated with acid-coated). Course duration is 2 — 3 weeks. By manuf that the development of pancreatic th th ball helps hypertonicity as SO, which causes intraductal hypertension in S, and its failure, which results in duodenopancreatic reflux and activation of pancreatic enzymes in Wirsung's duct. Removing spasm SO and preventing its failure duspatalin blocking offense mechanisms of CP and pancreatic pain [15]. Efficiency of "Duspatalin" in postcholecystectomical syndrome (PHES) is proved. In addition, "Duspatalin" effectively corrects the activity of SB in physics and chemistry GSD stage, ie in case of sludge formation after CE [10].

Another recommended in such situations ratom drugs with spasmolytic action is deston O (himekromon). This is choleretic drug increases the formation and excretion of bile, has antispasmodic in selectively in effect on the bile ducts, SO, does not reduce the motility of the gastrointestinal tract, reduces stagnation of bile, prevents the crystallization of cholesterol and thus the development of cholestasis. The product is appointed for 30 minutes to 200 — 400 mg 3 times a day for two weeks.

In restoring the normal outflow of bile in the absence GB along with cross SB great importance pressure level in the KDP. If it exceeds the secretory pressure of bile and pancreatic juice, they will be deposited in iliary and pancreatic ducts of the consequences. In this regard, reduction of duodenal hypertension is considered a condition for treatment of dyskinesia SO. When choosing a treatment strategy should take into account the main pathogenetic mechanism of duodenal hypertension is excessive content of liquid and gas in the lumen of the duodenum, resulting in fermentation putrefactive processes caused by microbial contamination. For decontamination of KDP spend 1 — 2nd seven-day course of antibiotic therapy with mediation drug at the next course of treatment. Antibiotics should even prescribe a prophylactic purpose, without waiting for the development of septic complications. For empirical antibiotic should take into account the degree of penetration of the drug into the fabric of pancreas relative sensitivity of microbial flora (Escherichia coli, staphylococcus) and the presence pancreotoxicity. Carbapenems, fluoroquinolones well into the fabric of the pancreas, creating a concentration there, far exceeding the minimum oppressed plentiful. When fungal fluconazole is the drug of choice. Drugs Mr. tissue and the concentration at which to run than the minimum thick — penicillins broad spectrum, cephalosporin III and V and generations. Aminoglycosides, cephalosporins and generation tetracyclines poorly penetrate the pancreas does not provide even minimal oppressed

concentration. In biliary pancreatitis, especially in cholangitis, reasonable, ampioks (4 — 6 g per day, cefoperazone (2 — 4 grams per day) Biseptol, nitrofurans). Remember that causes the formation of ceftriaxone, the white ing sludge and pankreotoksychnymy are the following antibiotics: rifampicin, isoniazid, sulfonamides and sulfasalazine, which is why they should not be applied in pancreatitis [8]. Drugs of choice are: doxycycline — 0, 1 g twice daily Biseptol — 950 mg twice daily furazolidon — 0, 1 mg three times daily, ciprofloxacin — 250 mg twice daily [14]. Simultaneously with the value intestinal antiseptic in some casesused prebiotics. With diarrhea — Hilak — forte 60 drops three times a day for 1 week, then 30 drops three times a day for 2 weeks. In the case of constipation — lactulose 1 — 2 tablespoons 1 per day until normalization of stool. After the antibiotic therapy are shown probiotics. One of the prominent representatives of probiotics is bifiform appointed 1 capsule twice daily for 2 weeks.

An important role in the development of functional disorders and chronic abdominal pain is played psycho-social factors and social deadaptation. It is believed that they may be primary in the development of functional disorders, and combined with a genetic predisposition determine the formation of motor disorders and visceral hypersensitivity. Testing patients for the scale we psychosomatic complaints indicates a gain after suffering psychosomatic CE that causes of psychosomatic correction (tranquilizers, antidepressants, antipsychotics).

Visceral pain of pathology would iliarnoyi system occurs in response to a rapid increase in intraductal pressure and stretching wall GB and through irritation of pain receptors located in the muscular membrane of these organs. Causes of bile hypertension and biliary colic varied, but the advantages are appointed but with dyskinesias and tsiey SO PHES. In hypersevretory forms of CP, which occurs usually with intense recurrent pain that brings patients physical and mental suffering, an important pathogenetic importance relieve pain [16].

In the first stage, the task is to create a functional Pancreas peace, because active pancreatic secretion is the main cause of increasing hydrostatic pressure in the ductal system pancreatic at constrained outflow (the main cause of pain). This is achieved in the following ways:

- receiving large doses of current drugs polyenzyme (Creon, mezim forte). The high concentration of enzymes in the duodenum causes inhibition pancreatic exosecretion by inhibiting the release of cholecystokinin in the duodenum and secretin, who are normally stimulate the secretion of pancreas. Also contributing to the disappearance of digestive disorders that lead to the appearance of dyspeptic disorders (flatulence, diarrhea) [3];
- maximum inhibition of acid gastric secretion inhibitors by taking proton pump, H_2-blockers of receptors secretion of histamine. It hydrochloric acid gastric juice, moving in the duodenum, stimulates formation of secretin and pancreozymin that dramatically increase exosecretion of pancreas;
- introduction sandostatin or octreotide — synthetic analogue of the hormone somatostatin, which inhibits the formation of secretin and

pancreozymin in the duodenum and increases the release of endogenous morphine (endorphins and enkephalins) that do pain-relief and effect and affect the general adaptation syndrome.

These measures reduce and relieve pain by reducing hypertension in the ductal system pancreas.

Pain-relief effect in CP have antioxidants (1-methionine, carotene, vitamins C and E, selenium) —decreases pain in 90.0% of patients, including 30.0% — pain disappeared completely.

When patients the phenomenon of "evasion of pancreatic enzymes in the blood" of the authors continue to recommend the appointment of protease inhibitors and kinine imbalance correction — aprotytin and its analogs (contrical, hordoks) which inactivate trypsin in the bloodstream and can limit and reduce fire autolysis inflammatory tissue swelling pancreas. In the case for the hen to purchase these measures insufficient pain, prescribe narcotic analgesics, metamizol sodium or analginum, combined analgesic baralgin, diclofenac (voltaren) ketaprofen paracetamol.

According to the data of literature and clinical observations, drugs "Deksalhyn" and "Spazmomen" showed a high therapeutic efficacy, particularly pain was stopped in all patients with PHES. "Deksalhin" in patients with PHES has a pronounced analgesic and anti-inflammatory effect of an intramuscular administration in the first 30 — 45 minutes. and rapid drug of choice in cases where tablets antispasmodic and not full relief of pain; also during diagnostic manipulations (upper endoscopy, duodenal intubation) during the implementation of which is necessary to quickly eliminate painful spasm. The study "Spazmomen" showed a pronounced therapeutic effect, due to antispasmodic action, and in 50% of patients after treatment with this drug was found decrease pain [12].

The use of inhibitors of proton n th pump (PPI) (omeprazole, pantoprazole, lansoprazole, rabeprazole, etc.) In CP justified because they inhibit the synthesis of hydrochloric acid pair is Talne cells of the gastric mucosa, resulting in greatly reduced production of secretin and exocrine in activity pancreas. Preparations are marked with pain-relief effect of pancreatitis in patients resistant to H_2-histamine -term blockers. Development hypoacid temporary condition, especially in the treatment of omeprazole, may lead to increased abdominal bloating or diarrhea and that is why PPI at CP appoint only 8 — 10 days.

The presence of the majority of patients relative enzyme deficiency resulting in destruction of digestive enzymes duodenal and thin intestine microflora, reducing the level of intraduodenal pH, as well as disruption of mixing them with food chyme is the justification for the appointment of enzyme preparations. Enzymes pancreas have not only digestive function, but also regulate motor function of the stomach and duodenum. The tendency to diarrhea prescribe pancreatin: mezim forte, Creon, and other 1 dose three times daily with meals; the tendency to constipation — combination products containing pancreatin, bile acids, hemicellulose, Festal, digestal 1 tab. daily with meals. Adequate therapy PHES pancreatic enzymes requires the use of modern drugs with high efficiency and reasonable price. A common recommendation is therapeutic purpose enzymes in

the postoperative period in sufficient doses for 20 minutes for 2 — 3 months, and further maintenance therapy for another 1 — 2 months to achieve full effect. Preparations pancreatic enzymes are non-toxic and safe, are characterized by a very small number of adverse events that are not always associated with taking the drug, representing a manifestation of the underlying disease (diarrhea, discomfort in the abdomen).

In now and cords and also established that microgranules dosage forms of drugs have enzymatic ü advantages over tablets. Preparations containing minimicrospheres (Creon 10 000 and Creon 25 000), is the first choice of enzyme therapy. Its advantages are: minimicrospheres presentation, high activity enzymes, reliable and sour is stable, but at the same time soluble shell in the duodenum, the presence in the preparation of additional lipolytic enzyme.

To normalize the stool when constipation shown "mukofalk" and/or "Duphalac." Both drugs are safe and effective. The advantage of "mukofalk" is the possibility of selecting the dose for the treatment of both a crepe and diarrhea, and in that it helps reduce blood cholesterol levels. "Duphalac" in PHES shown not only that weaken possesses abundant action, but it m having pronounced prebiotic effect, in addition, "Duphalac " reduces the lithogenic properties of bile.

Enzymatic pancreas failure naturally accompanied by bloating and pochasche Mr. tion emptying, which is why, for the removal of the manifestations appropriate to appoint smectite, which has effects absorbs decay products, toxins Pathogenic 's and opportunistic bacteria [8]. Also, to stimulate the recovery of cell membranes and maintain the balance between nitric peroxide not nnyam lipids and antioxidant protection to include comprehensive treatment and antioxidants, including tocopherols, ascorbic acid, "Methionine", "Unitiol" [9].

Providing outflow secret pancreas is made using endoscopic techniques when violations are organic in nature (constrictive papillitis) or through medication, if available breach functional nature (duodenostasis, spasm or failure SO) [6]. In the presence of biliary hypertension, choledocholithiasis, constrictive papillitis according to prescribed indications balloon dilatation or papillosphincterotomy removing stones from the common bile duct.

Patients with CP and PHES Rehabilitation prescribed physiotherapy (mud, magnetic) and spa treatment. Typically, spa treatment is prescribed 6 months after CE. In the complex include rehabilitation of water and low average mineralization "NAFTA", "Morshyn", which in turn reduces intraduodenal pressure, reduce hypertonicity SO, stimulate bile formation, bile, exocrine function pancreas [2].

For at last renaissance experiencing "pure" non-drug methods of correction of patients with CP and, in particular, after undergoing CE, which should be widely included in the comprehensive rehabilitation of patients after their scientific and clinical justification. The range of these methods is very large, classic acupuncture, homeosyniatriya, homeopathy, herbal medicine, multifrequency metal application, informotherapy and others.

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Article presents the analysis of literature on the modern methods and future directions of the complex rehabilitation of patients with chronic pancreatitis after cholecystectomy.