ETHIOPIAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 10, October-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980 2024: 7,662

Dadabaev E.V.

doctor of ultrasound diagnostics "Center of phthisiology and pulmonology",

Dadabaeva Z.I.

Assistant of the Department of Rehabilitation of ASMI,

Mamadalieva Ya.S.

Doctor of Medical Sciences, Head of the Department of Radiology, Tashkent Pediatric Medical Institute,

Fazilov Abdukakhkhor Vohidovich

Doctor of Medical Sciences, Deputy Director of the REPUBLICAN SPECIALIZED SCIENTIFIC AND PRACTICAL MEDICAL CENTER OF PEDIATRICS, Tashkent city

POSTCHOLECYSTECTOMY SYNDROME. A CLINICAL CASE FROM PRACTICE

Introduction. The article is devoted to the study of postcholecystectomy syndrome, and also presents the causes, clinic, treatment and prevention of this pathology. For clarity, the article considers a clinical case of the diagnosis of "PChES".

Key words: Postcholecystectomy syndrome, gallstone disease, disease, hepatobiliary system, cholesterol, bilirubin, treatment, patients, heredity, gender, age.

Gallstone disease (GD) is a significant problem in Uzbekistan. This is a disease of the hepatobiliary system caused by a violation of the metabolism of cholesterol and/or bilirubin, which leads to the formation of gallstones in the gallbladder and/or bile ducts.

In recent decades, the widespread introduction of minimally invasive technologies has significantly improved the results of treatment of patients with acute inflammation of the gallbladder. However, despite this, the overall mortality rate in this pathology remains quite high, varying between 12-20%.

Risk factors include heredity, gender, age (women over 35 are more likely to suffer), diseases of the biliary system that lead to impaired bile outflow, and concomitant diseases such as diabetes mellitus and Crohn's disease.

In Uzbekistan, as in other countries, gallstone disease covers a significant proportion of surgical pathologies, and today 10-12% of the population in Western countries and 3-4% in Asian countries suffer from this disease.

Postcholecystectomy syndrome (PChES) is a group of diseases of the hepatobiliary pancreatic system that occur after surgery on the gallbladder or on the biliary tract for GD. This condition occurs in 5 - 25% of cases. The syndrome occurs more often in women. There is also evidence that young people are more likely to develop postcholecystectomy syndrome than a group of people over the age of 50.

The reasons contributing to the development of PChES:

1. Late surgery - cases when, after the confirmed active form of GD, stone migration into the common bile duct and (or) acute cholecystitis developed;

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 10, October-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980 2024: 7,662

2. Incomplete examination before and during surgery. This includes failure to perform ultrasound and surgical cholangiography, in connection with which, stones and narrowing of the common bile duct, stenosis of the large duodenal papilla and other pathology are not detected, which leads to incomplete surgical care;

3. Actual surgical failures during surgery: duct damage, improper introduction of drains, leaving a long stump of the cystic duct, imposition of an excessively narrow choledohodenoanastomosis, non-removal of detected stones.

Pathogenesis

Experimental and clinical observations indicate that after removal of the gallbladder, coordination of the sphincter apparatus is disrupted. It's fine contraction of the gallbladder is accompanied by relaxation of the Oddi sphincter, which is the main regulator of bile and pancreatic juice entering the duodenum. Due to this mechanism, bile in sufficient quantity "on demand" enters the duodenum and digests food. After removal of the gallbladder, there is a prolonged spasm of the Oddi sphincter, which leads to dilation of the biliary tract, stagnation of bile and the addition of infection. Because of this, concretions develop in the bile ducts a few years after surgery, which are the main cause of the development of PChES. Dynamic cholescintigraphy is used to assess the sphincter apparatus of the biliary tract. The value of the method lies in the fact that it is possible to observe for a long time the movement of a radiopharmaceutical in the hepatobiliary system under physiological conditions. After surgery, the chemical composition of bile also changes, it becomes more lithogenic with a low cholesterol coefficient, and its bactericidal property decreases. Thus, the chaotic intake of aggressive bile leads to irritation of the mucous membrane of the duodenum, stomach and esophagus, thereby developing duodenitis, gastritis, esophagitis. Duodenitis is accompanied by duodenal dyskinesia, functional duodenal insufficiency, duodenogastroreflux and discharge of contents into the bile and pancreatic ducts. Bile entering the large intestine leads to diarrhea and colic. A decrease in the protective properties of bile leads to an increased proliferation of microgranisms in the intestine, which is the cause of dysbiosis of the small and large intestines. In addition to the problems of impaired deposition and excretion of bile, the cause of the development of PChES may also be postoperative adhesive processes and cicatricial stenosis of the bile ducts [1].

Clinical features of PChES:

1. Dyspeptic variant – bitterness in the mouth, nausea, flatulence, relaxation of stool.

2. Pain syndrome of varying severity. There are bilateral, pancreatic and mixed types of pain. With the biliary type, the pain is localized in the epigastrium or right hypochondrium, it can radiate into the back and right shoulder blade. With pancreatic - in the epigastrium and left hypochondrium, it can radiate into the back. When mixed, the pain often has a shingling character.

3. The jaundice variant is periodic subectericity of the skin with or without pain.

4. The clinical asymptomatic variant is the absence of complaints, the presence of changes in blood biochemical parameters [1].

Treatment

The purpose of treatment: to restore the normal flow of bile and pancreatic secretions from the biliary and pancreatic ducts into the duodenum. Treatment objectives: to normalize the chemical composition of bile; to restore the patency of the Oddi sphincter; to restore the normal composition of the intestinal

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 10, October-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980 2024: 7,662

microflora; to normalize the digestive processes and motility of the small intestine for the prevention of duodenal hypertension. Drug treatment of Oddi sphincter dysfunction is aimed at relieving spasm the smooth muscles of the latter. For this purpose, a number of drugs are used that have antispasmodic effect. Representatives of this group of drugs are drotaverine (no-shpa, no-shpa forte), bencyclane (halidor), dicycloverine (trigan-D), alverine (meteospasmil), nitrates (nitroglycerin) are used to quickly relieve pain. The mechanism of action of nitrates is reduced to the formation of free radicals of nitric oxide (NO2) in smooth muscles, which activate guamylate cyclase, which leads to relaxation of smooth muscles. In restoring the normal outflow of bile in the absence of a gallbladder, along with the patency of the Oddi sphincter, the pressure level in the duodenum is of great importance. If it exceeds the secretory pressure of bile and pancreatic juice, they will be deposited in the biliary and pancreatic ducts with appropriate consequences. The pressure in the duodenum is increased due to the presence of liquid and gas in it, which are formed as a result of fermentation putrefactive processes caused by microbial contamination. 1-2 seven-day courses are conducted for decontamination of the duodenum antibacterial therapy with a change of drug during the next course of treatment. Depending on the severity of the disease, nitrofurans, macrolides, and fluoroquinolones are used. The use of buffer antacids prevents damage to the intestinal mucosa from the action of deconjugated bile acids. Hepatoprotectors with choleretic and antispasmodic effects increase choleresis and bile flow into the duodenum, contributing to the resolution of duodenal hypertension, improving bile chemistry.

Prevention

1)Eat as little as possible foods rich in cholesterol (animal fats) and fatty acids (fried foods)

2) Eat regularly and rationally, the frequency of meals should be 4 times a day

3) Eat more dietary fiber – vegetables, fruits, herbs. At the same time, it is better to use vegetables and fruits in boiled and baked form

4)Give up bad habits (smoking, alcohol).

A clinical case

Patient M., born in 1969, on 03.09.2024, called an ambulance with complaints of intense pain in the epigastric region and right hypochondrium, periodic nausea and periodic temperature rise to 37.8 degrees, dark urine color.

Anamnesis of the disease: considers himself ill for two weeks when he began pain in the epigastric region and right hypochondrium. Earlier in June 2024, she was operated on for GI, and a cholecystectomy was performed. 1 month after surgery, severe pain syndrome. The examination revealed stricture of the distal choledochus, performed EPST. 03.09.2024 she was hospitalized in the surgical department of the Andijan regional hospital with a diagnosis of PChES, choledocholithiasis.

Life history: grew and developed according to gender and age. She worked as a kindergarten teacher for 20 years. Currently retired. Diseases suffered in adulthood – GD. He does not smoke, and rarely drinks alcoholic beverages. Heredity is not burdened.

General history: general weakness has been present since the first days of the disease. There is a periodic increase in temperature to 37.8 degrees. Feeling of dryness in the throat. There is a slight shortness of breath. Feels a heartbeat, non-intense, short-lived with physical exertion and at rest.

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 10, October-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980 2024: 7,662

The appetite is average, there is an aversion to a number of foods. Thirst is increased, dry mouth. The taste in the mouth is bitter. Heartburn worries after eating fried, fatty foods. There is a feeling of heaviness after eating, vomiting may occur that does not bring relief. The sleep is restless, shallow. Headaches are rarely bothered, more often in the frontal and temporal regions.

Objective examination: the condition is satisfactory, the position is active. Leather and mucous membranes of physiological coloration. The tongue is dry, the papillae are somewhat smoothed. The physique is approaching hypersthenic. The skin is pale pink, dry. Male-type hair loss. Single submandibular, axillary lymph nodes of 0.7 cm in size, of a soft elastic consistency, mobile, painless, not soldered to each other and the surrounding tissue are palpated. The abdomen is symmetrical, evenly participates in the act of breathing. Kulen's Symptoms, Halsted and Turner are negative. With superficial palpation of the abdomen, soreness in the epigastric region in the right hypochondrium. The lower edge of the liver is soft, smooth, and painless. The gallbladder is not palpable (cholecystectomy was performed). There is a local limited dullness with abdominal percussion in the sloping areas of the abdominal cavity (indicates the presence of effusion). With abdominal auscultation, there is a weakening of intestinal noises.

Laboratory and instrumental data:

-General blood test from 09.09.24. Conclusion: unchanged.

-Biochemical blood test from 09.09.24. Conclusion: there is an increased glucose content in the blood.

-Urine test from 03.09.24. Conclusion: leukocyturia.

-ECG from 07.09.24: moderate sinus bradycardia, signs of left ventricular hypertrophy.

-Esophagogastroduodenoscopy from 08.09.24

Esophagus is a lumen, mucosa without features. The veins of the esophagus are not dilated. The stomach is a normal – sized lumen, with a moderate amount of transparent liquid in the lumen. liquids. The mucous membrane is focally hyperemic. On the walls of the anterior, posterior, small curvature of the antrum, the body of the stomach are single, acute, diffusely scattered erosions with a diameter of 0.1 cm. the gatekeeper is of regular shape. The duodenum – bulb is not deformed. Mucus in normal amounts, bile in moderate amounts, a vater nipple of a polypoid shape, swollen, hyperemic. The mouth of the choledoch is 0.3 – 0.4 cm. Conclusion: the condition after EPST. Papillitis. Focal gastritis. Duodenite.

-Ultrasound examination from 03.09.24. Conclusion: diffuse changes in the liver, pancreas, choledocholithiasis with choledoch dilation.

-Ultrasound examination of the abdominal cavity from 07.09.24. Conclusion: condition after cholecystectomy, choledocholithiasis, diffuse changes in the liver, pancreas.

-Ultrasound examination from 11.09.24:

The liver is not enlarged. The bile ducts are not dilated. Choledoch is visualized for 4-5 cm, diameter up to 5 mm, contains gas in small amounts. Subhepatic "traces" of free fluid up to 0.5 cm, in the pelvis up to 1.5 cm.

The pancreas is without dynamics.

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 10, October-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980 2024: 7,662

-In the right pleural cavity along the scapular line , a layer of free fluid up to 1.5 cm.

Ultrasound examination from 13.09.24: in the pleural cavity on the right free fluid is localized in the form of a layer up to 5 cm thick, no free fluid was found in the abdominal cavity.

Surgical intervention data:

On September 14, 2024, a planned operation was performed in connection with the data of the clinic, X-ray and endoscopic examinations, which revealed PChES, choledocholithiasis. Given the severity of the condition, concomitant pathologies, the presumed the scope of the operation: laparotomy, choledochotomy, CDA under ETN. An "old" postoperative scar was excised under the ETN. The adhesive process is expressed in the right hypochondrium. A choledochus with a diameter of 2 cm was isolated, opened longitudinally, a concretion with a diameter of 1 cm was removed. The WPC flows in the transverse direction. Choledohodenal anastomosis was applied with a double-row suture. A PCV drainage is applied in the right subhepatic space. Stitches were applied to the wound.

Postoperative period:

On 17.09.24 complaints of severe weakness, fatigue, dizziness, headaches pain, dry mouth. The sleep is restless, shallow. Appetite is reduced. Stool 2 times a day, black, homogeneous. Urination 7 times a day, urine is dark. Objectively: the condition is satisfactory, the consciousness is clear, the position is active. The skin is pale pink, the visible mucous membranes are clean. The tongue is covered with a grayish coating over the entire surface, dry. The lymph nodes are not enlarged, of a soft elastic consistency, painless, not soldered together and the underlying tissues. Breathing is vesicular, there is no wheezing. the heart tones are clear, rhythmic. The abdomen is soft, in the right hypochondrium in the area the suture is moderately painful. The concussion symptom is negative. The liver is palpated along the edge of the right costal arch. The spleen is not palpable. There is no swelling. the bandage is dry, the seam is not bleeding. Heart rate – 78 beats/min, BHD – 18/min, blood pressure 130/70 mm Hg.

On 24.09.2024, she was discharged with positive treatment dynamics.

The final clinical diagnosis was made: choledocholithiasis. PChES.

Concomitant diseases: focal gastritis.

Justification of the diagnosis: anamnesis data (the patient is ill with GD, cholecystectomy was performed in 2024)

Conclusion: patients with PES need timely surgical intervention before the development of complications of diseases, as well as a comprehensive examination of patients in preparation for surgery. Patients in the postoperative period need medical supervision and active rehabilitation measures.

Literature:

1. Bystrovskaya E. V. Postcholecystectomy syndrome: pathogenetic and therapeutic aspects of the problem // MS. 2012. No.2. URL: https://clck.ru/RvBXE (date of application: 11/13/2020).
2. Burkov, S. G. On the consequences of cholecystectomy or postcholecystectomy syndrome / S. G. Burkov // News of medicine and pharmacy. M. 2004. No. 4. pp. 37-38.

eISSN: 2349-5715 pISSN: 2349-5707

Volume: 11, Issue 10, October-2024 SJIF 2019: 4.702 2020: 4.737 2021: 5.071 2022: 4.919 2023: 6.980 2024: 7,662

3. Burkov S. G. Cholelithiasis / S. G. Burkov, A. L. Grebenev // Handbook of gastroenterology. M.: Medicine. 2004. Vol. 2.

4. Grigoriev, P. Ya. Gallstone disease and the consequences of cholecystectomy /P. Ya. Grigoriev, I. P. Soluyanova, A.V. Yakovenko // The attending physician. 2002. No. 6. pp. 26-32.

5. Kuzin, M. I. Surgical diseases / M. I. Kuzin, O. S. Shkrob, N. M. Kuzin. M.

6. Medicine, 2000. 567 p.Vakhrushev Ya.M., Khokhlacheva N.A. Cholelithiasis: epidemiology, factors risk factors, features of the clinical course, prevention. Archive of Internal Medicine. 2016;6(3):30-35. https://doi.org/10.20514/2226-6704-2016-6-3-30-35