

## BILIARY PERITONITIS AS A COMPLICATION OF CHRONIC CALCULAR CHOLECYSTITIS

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**Abstract:** in recent years, due to the increase in the number of patients suffering from liver diseases, its complications and cholelithiasis, there has been a worldwide trend towards an increase in the frequency of surgical interventions on the liver and biliary tract. Postoperative biliary peritonitis is one of the dangerous complications of surgical interventions on the liver and biliary tract. This article is devoted to the study of one of the severe complications of the early postoperative period during surgical interventions on the liver and biliary tract - biliary peritonitis. The article presents the reasons, the main factors predisposing the occurrence of postoperative biliary peritonitis. A brief review of the literature on this disease is carried out, and a clinical case of biliary peritonitis is described.

**Keywords:** cholecystitis, choledocholithiasis, laparotomy, biliary peritonitis.

## БИЛИАРНЫЙ ПЕРИТОНИТ КАК ОСЛОЖНЕНИЕ ХРОНИЧЕСКОГО КАЛЬКУЛЕЗНОГО ХОЛЕЦИСТИТА

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**Аннотация:** за последние годы, в связи с увеличением количества больных, страдающих заболеваниями печени, ее осложнениями и желчнокаменной болезнью, во всем мире наблюдается тенденция к увеличению частоты оперативных вмешательств на печени и желчевыводящих путях. Одним из опасных осложнений при оперативных вмешательствах на печени, желчевыводящих путях является послеоперационный желчный перитонит. Данная статья посвящается изучению одного из тяжелых осложнений раннего послеоперационного периода при оперативных вмешательствах на печени и желчных путях - желчному перитониту. В статье представлены причины, основные факторы, предрасполагающие возникновению послеоперационного билиарного перитонита. Проведен краткий обзор литературы по данному заболеванию, и описан клинический случай по билиарному перитониту.

**Ключевые слова:** холецистит, холедохолитиаз, лапаротомия, билиарный перитонит.

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The onset of postoperative biliary peritonitis is facilitated by the duration and duration of the underlying disease, the quality of preoperative preparation, the volume of the operation performed, the technical and tactical capabilities of the doctor; the patient's age, immunobiological status and regeneration, as well as the presence of pathogenic microflora in the biliary tract and liver. It should be noted that biliary peritonitis almost always occurs due to severe liver dysfunction, and in this regard, the outcome of relaparotomy in liver and biliary tract diseases depends not only on the timing of its implementation, but also on the previous liver failure. The prognosis for life in such patients is very doubtful,

Causes of postoperative biliary peritonitis:

Infection of spilled bile, blood and inadequate drainage of residual cavities and abdominal cavity - 27%;

Subphrenic abscesses - 20%;

Inconsistency of choledochoduodenoanastomoses sutures - 18%;

Intraoperative damage to the bile ducts - 13%;

Loss of drains and clips from the common bile duct and abdominal cavity - 16%;

Continuing biliary peritonitis - 6% [4]. The following stages of peritonitis are distinguished:

The reactive stage develops on the first day. The position of the patient is usually forced - on the back or on the side, with the legs brought to the stomach. Most often, patients complain of abdominal pain, which can be acute or dull, at first the pain is weak and not localized, but then it progresses and intensifies with any movement and palpation. With abdominal percussion - the absence of hepatic dullness. Auscultation reveals a "falling drop noise". The color of the skin is pale, acrocyanosis is noted. Body temperature is subfebrile. In addition to the pain syndrome, the patient is worried about nausea, vomiting of bile, which does not bring relief and a feeling of thirst. The main peritoneal symptoms: Shchetkin-Blumberg symptom - with a sharp abduction of the hand from the anterior abdominal wall, the patient experiences acute pain; Mendel's symptom - detection of pain in the anterior abdominal wall during percussion;

The toxic stage develops on the third day. Symptoms of toxic encephalopathy are manifested as lethargy and confusion. Disturbance of microcirculation is characterized by pallor, especially marbling of the skin. Blood pressure decreases. Tongue - coated with white, dry. Symptoms of dehydration appear.

Terminal stage. The patient's condition is extremely serious: severe dehydration, respiratory failure, pointed facial features, no pulse on the peripheral vessels. As a rule, such a patient is in the intensive care unit [4, 5]. For early diagnosis of postoperative biliary peritonitis, laboratory and instrumental research methods are recommended, including ultrasound, CT and laparoscopy: most patients have leukocytosis (more than  $11 \cdot 10^9 / l$ ) with a shift of the leukoformula to the left. The level of procalcitonin is a reliable value for the diagnosis of peritonitis and abdominal sepsis - from 1.3 to 5.9 ng / ml. Changes in the content of levels of IL - 1, 6, 8 and TNF, C-reactive protein were also noted [2, 5]. Ultrasound examination (ultrasound) can detect an increased amount of peritoneal fluid, provided that it is more than 100 ml. Computed tomography (CT) can detect even a small amount of fluid in the area of inflammation, as well as other pathologies of the gastrointestinal tract with a very high level of sensitivity than ultrasound. Magnetic resonance imaging (MRI) is a technology used primarily to diagnose intra-abdominal abscesses. Diagnostic laparoscopy is widely used to determine the cause of acute abdominal pain. It can also be accompanied by laparoscopic treatment when a surgical pathology is detected [1, 4].

Treatment of biliary peritonitis: the general scheme of preoperative preparation includes catheterization of the central vein, bladder, stomach; intravenous administration of crystalloid solutions up to 1500 ml; colloidal - 400-500 ml for replenishing the BCC; IV use of broad-spectrum antibiotics. It is necessary to achieve stabilization of systolic blood pressure above 90 mm. rt. Art., CVP should be positive, and urine output should exceed 30 ml / hour for an adult patient.

In the later stages of widespread biliary peritonitis, the task of relaparotomy is:

Elimination or limitation of the source of peritonitis;

Removal of pathological contents from the abdominal cavity;

External drainage of the bile ducts with the creation of optimal bile outflow;

Sanitation and drainage of the abdominal cavity [3, 5].

The material presented by us describes a clinical case of one of the complications of chronic calculous cholecystitis - biliary peritonitis. Patient A., 57 years old, on November 8, 2019 turned to the surgical department of the 1st RCH of Izhevsk with complaints of intense aching pains in the right hypochondrium, which radiate to the epigastric region, yellowness of the skin and itching of the skin, nausea that does not pass, general weakness. Patient A. was referred for planned surgical treatment, hospitalized in the surgical department 1 of the RCH. The condition is satisfactory, the skin and sclera are icteric; vesicular breathing, no noise and wheezing, NPV = 16 per minute, rhythmic heart sounds, clear, blood pressure - 150/85 mm. rt. Art., heart rate = 74 per minute, the tongue is dry, the stomach is slightly swollen painful on the right. Symptoms of Ortner, Lepene, Murphy are positive. Symptoms of peritoneal irritation are negative. Active peristalsis. Concussion symptom negative on both sides. No edema.

Data of laboratory research methods: Total bilirubin -25.0  $\mu\text{mol} / L$ , direct -12.0  $\mu\text{mol} / L$ , indirect 13.0  $\mu\text{mol} / L$ . Ultrasound of the abdominal cavity from 8.11.2019, Exacerbation of chronic calculous cholecystitis. Cholangitis. Diffuse changes in the structure of the pancreas. Based on the complaints of patient K., data from laboratory and instrumental studies, the final diagnosis was made: gallstone disease. Chronic calculous cholecystitis. Choledocholithiasis. Concomitant diseases: Hypertension 2 tbsp., 1 tbsp., Risk 4, CHF 1. Diabetes mellitus type II. On November 2019, the operation was performed - laparotomy, cholecystectomy, choledocholithotomy, choledochoduodenoanastomosis according to Yurash. The abdominal cavity was sanitized and drained with the help of PVC tubes, due to the failure of the choledochoduodenal anastomosis. Operating wounds are sutured in layers. Aseptic dressing. Description of the macro-preparation: Gallbladder 9 \* 5 cm, walls up to 0.5 cm, multiple calculi in the lumen. Pronounced adhesive process in the gallbladder. On November 2019, a repeated laparotomy was performed due to complications and biliary peritonitis with drainage of the

common bile duct according to Keru, as well as sanitation of the abdominal cavity with furacilin. On November 13, 2019, another repeated laparotomy and control sanitation of the abdominal cavity with furacilin were performed. An autopsy and drainage of the retroperitoneal phlegmon was performed on the right, in the lumen of pus. and also sanitation of the abdominal cavity with furacilin. On November 13, 2019, another repeated laparotomy and control sanitation of the abdominal cavity with furacilin were performed. An autopsy and drainage of the retroperitoneal phlegmon was performed on the right, in the lumen of pus. and also sanitation of the abdominal cavity with furacilin. On November 13, 2019, another repeated laparotomy and control sanitation of the abdominal cavity with furacilin were performed. An autopsy and drainage of the retroperitoneal phlegmon was performed on the right, in the lumen of pus.

Pathologic diagnosis: Main disease: gallstone disease. Chronic calculous cholecystitis. Choledocholithiasis. Complication of the underlying disease: Diffuse biliary peritonitis. Operation: laparotomy, cholecystectomy, choledocholithotomy, choledochoduodenoanastomosis according to Yurash, sanitation and drainage of the abdominal cavity, repeated laparotomy + drainage of the choledochus opera Keru, another laparotomy, opening and drainage of the retroperitoneal phlegmon from the right, necrotic lumen of the gleam. Concomitant disease: Hypertension 2 tbsp., 1 tbsp., Risk 4, CHF 1. Diabetes mellitus type II.

Conclusion: A clinical case of one of the complications of chronic calculous cholecystitis - biliary peritonitis indicates the failure of the choledochoduodenal anastomosis. To reduce the incidence of postoperative biliary peritonitis, it is advisable to carry out early diagnosis and treatment of latent hepatic insufficiency, followed by low-traumatic surgical interventions, rational decompression of the biliary tract, and drainage of the abdominal cavity. To exclude the complications that arise, it is necessary to carry out laboratory and instrumental studies after surgery on the gallbladder and biliary tract. Unfortunately, insufficient postoperative diagnosis and treatment in this situation led to the death of the patient. Also, the outcome of this operation was influenced by concomitant pathology: hypertension, type II diabetes mellitus; elderly patient (57 years old); reduced mechanisms of the body's immunobiological defense and slowed down regeneration; failure of the choledochoduodenal anastomosis; opening and drainage of the retroperitoneal phlegmon on the right.

#### *References / Список литературы*

1. *Davlatov S.S., Rakhmanov K.E., Abdurakhmanov, D.Sh.* Tactics of managing patients with bile leakage after cholecystectomy // *Problems of Science and Education*, 2020. № 13 (97).
2. *Rahmanov Kosim DS, Laylo R., Abdurakhmanov D.Sh.* Improvement of surgical treatment of intraoperative injuries of magistral bile duct // *The 17th International medical congress of students and young scientists*. Ternopol., 2013. S. 22-24.
3. *Kurbaniyazov Z.B., Rakhmatova L.T., Zainiev A.F., Rakhmanov K.E., Saidmuradov K.B., Davlatov S.S., & Abdurakhmanov D.Sh.* (2013). Surgical approach to the treatment of patients with "fresh" injuries of the main bile ducts. *Academic Journal of Western Siberia*. 9 (2). 14-15.
4. *Rizaev J.A., Rizaev E.A., Akhmadaliev N.N., Abdurakhmanov D.Sh.* (2020). Modern perspective on the problem: a new approach to the treatment of Covid-19 *Indian Journal of Forensic Medicine and Toxicology*. 14 (4).
5. *Abdurakhmanov D.Sh. & Olimdzhonzoda H.L.* (2020). Evolution of diagnostic methods and surgical treatment of liver echinococcosis. *achievements of science and education*. 16 (70).