## BILE OUTFLOW AFTER CHOLECYSTOMY IN EARLY POSTOPERATIVE PERIOD: CAUSES AND SURGICAL CORRECTION

Arziev I.A. (Republic of Uzbekistan) Email: Arziev369@scientifictext.ru

Arziev Ismoil Alievich – Assistant,
DEPARTMENT OF SURGICAL DISEASES № 1,
SAMARKAND STATE MEDICAL INSTITUTE, SAMARKAND, REPUBLIC OF UZBEKISTAN

Abstract: the leading place in the structure of postoperative complications after cholecystectomy (CE) is occupied by external or intra-abdominal bile leakage in the early postoperative period, which should be considered as an independent problem, since it can have serious consequences and be life-threatening. Diagnosis of intra-abdominal bile leakage is a difficult task, the presence of safe drainage in the subhepatic space contributes to the early diagnosis and prevention of biliary peritonitis. The analysis of the results of surgical treatment of 3161 patients operated on for various forms of gallstone disease, who underwent cholecystectomy: laparoscopic access - 1847, mini-access - 1096, wide laparotomy - 218 in the period from 2010 to 2019. The use of minimally invasive endoscopic transduodenal interventions and laparoscopy, as well as active conservative therapy, made it possible to avoid laparotomy in 92.4% of patients with "minor" damage to the bile ducts after cholecystectomy.

**Keywords:** cholecystectomy, complication, bile leakage.

## ЖЕЛЧЕИСТЕЧЕНИЕ ПОСЛЕ ХОЛЕЦИСТЭКТОМИИ В РАННЕМ ПОСЛЕОПЕРАЦИОННОМ ПЕРИОДЕ: ПРИЧИНЫ И ХИРУРГИЧЕСКАЯ КОРРЕКЦИЯ

Арзиев И.А. (Республика Узбекистан)

Арзиев Исмоил Алиевич – ассистент, кафедра хирургических болезней № 1, Самаркандский государственный медицинский институт, г. Самарканд, Республика Узбекистан

Аннотация: ведущее место в структуре послеоперационных осложнений после холецистэктомии (ХЭ) занимает наружное или внутрибрюшное желчеистечение в раннем послеоперационном периоде, что следует рассматривать как самостоятельную проблему, поскольку оно может иметь серьезные последствия и быть опасно для жизни. Диагностика внутрибрюшного подтекания желчи - сложная задача, наличие безопасного дренажа в подпеченочном пространстве способствует ранней диагностике и профилактике билиарного перитонита. Проведен анализ результатов хирургического лечения 3161 пациента, оперированного по поводу различных форм желчнокаменной болезни, которым выполнена холецистэктомия: лапароскопическим доступом - 1847, мини-доступом - 1096, широкой лапаротомией - 218 в период с 2010 по 2019 гг. Применение малоинвазивных эндоскопических трансдуоденальных вмешательств и лапароскопии, а также активной консервативной терапии позволило избежать лапаротомии у 92,4% пациентов с «незначительным» повреждением желчных протоков после холецистэктомии.

**Ключевые слова:** холецистэктомия, осложнение, желчеистечение.

UDC 612.357(616.366-089.87)

**Relevance.** The leading place in the structure of postoperative complications after cholecystectomy (CE) is occupied by external or intra-abdominal bile leakage (BIL) in the early postoperative period, which should be considered as an independent problem, since it can have serious consequences and be life-threatening [1, 2, 3, 8].

Diagnosis of intra-abdominal bile leakage is a difficult task, the presence of a safety drainage in the subhepatic space contributes to early diagnosis and prevention of biliary peritonitis [4, 5, 6, 7, 9].

The analysis of the results of surgical treatment of 3161 patients operated about various forms of cholelithiasis, which performed CE: -by laparoscopic access - 1847, by mini-access - 1096, by wide laparotomy -218 on in the period 2010 - 2019 was carried out.

In 26 patients, the cause of bile leakage was "small" injuries, in 11 - "large". The cause of bile leakage in 26 (70.2%) patients (ie in 2/3 of cases) was "minor" lesions, the sources of bile leakage in which were aberrant hepatocystic ducts of the gallbladder bed (Lyushka's passages) - 4, failure of the cystic stump duct - 4 and loss of hepaticoholedochus drainage - 2. At the same time, in 16 patients the source of bile leakage was not established. This study did not include patients with iatrogenic (large) injuries of the main bile ducts.

In 14 (34.6%) patients with bile leakage with drainage of bile in a volume of 150-200 ml per day and in the absence of signs of peritonitis, satisfactory condition of patients, no changes in blood tests, dynamic observation with mandatory ultrasound control and conservative treatment (antispasmodics, infusion, anti-inflammatory and

antibacterial therapy). In 9 patients, the treatment was effective, the bile leakage along the drainage progressively decreased and completely stopped within 5-7 days, so no other diagnostic and therapeutic procedures were required.

3 patients required a puncture of the biloma under ultrasound control in order to evacuate the accumulation of fluid in the subhepatic space, and in 1 patient the cause of bile leakage was dropping out of drainage from the common bile duct.

In 2 more patients, conservative treatment was also ineffective, and they underwent retrograde cholecystopancreatography and EPST. In 1 patient, the cause of bile leakage was the failure of the cystic duct stump, and in 1 patient the source of bile leakage was not established. After endoscopic drainage of the biliary system, bile leakage in these patients stopped on days 2 and 5.

In the presence of LI according to the control drainage of more than 200 ml within 2-3 days after surgery, 12 (46.1%) patients underwent ultrasound of the abdominal cavity, retrograde cholecystopancreatography, if necessary, decompression of the biliary tract by endoscopic papillotomy or nasobiliary drainage. In 6 patients, EPST with nasobiliary drainage proved to be effective, and VBI was stopped within 5-7 days. In case of failure or ineffectiveness of retrograde cholecystopancreatography, persistence or intensification of abdominal pain, symptoms of intoxication and irritation of the peritoneum, 4 patients underwent relaparoscopy with additional electrocoagulation of the gallbladder bed, clipping of Lyushka's passages or an inconsistent stump of the cystic duct, adequate sanitation and drainage of the abdominal cavity.

Laparotomy, choledochostomy, sanitation and drainage of the abdominal cavity with diffuse biliary peritonitis were performed in 2 patients. Complications were noted in 2 (7.6%) patients (repeated bile leakage - 1, acute pancreatitis - 1).

Thus, ultrasound examination contributes to the choice of adequate surgical tactics for bile leakage. With the appearance of bile discharge according to the control drainage in a volume of no more than 200 ml per day with a tendency to decrease and absence of intraperitoneal bile accumulation and clinical manifestations of biliary peritonitis, conservative therapy can be limited. The use of minimally invasive endoscopic transduodenal interventions, diapeutic methods and laparoscopy, as well as active conservative therapy made it possible to avoid laparotomy in 92.4% of patients with "minor" damage to the bile ducts after CE.

## References / Список литературы

- 1. Davlatov S., Rakhmanov K., Qurbonov N., Vafayeva I. & Abduraxmanov D. (2020). Current State of The Problem Treatment of Mirizzi Syndrome (Literature Review)// International Journal of Pharmaceutical Research. 12. P. 1931-1939. DOI:https://doi.org/10.31838/ijpr/2020.SP2.340.
- 2. Davlatov S.S., Kasymov Sh.Z., Kurbaniyazov Z.B., Rakhmanov K.E., Ismailov A.O. Plasmapheresis in the treatment of cholemic endotoxicosis // «Academic Journal of Western Siberia», 2013. № 1. P. 30-31.
- 3. *Davlatov S., Kurbaniyazova F., Saidaxmedova D.* Plasmopheresis in the treatment of cholemic endotoxicosis // III International Medical and Pharmaceutical Congress. Chernivtsi, 2016. P. 163.
- 4. *Davlatov S.S.*, *Xamraeva D.*, *Suyarova Z.* Management of the Mirizzi syndrome and the surgical implications of cholecystcholedochal fistula// International Journal of Medical and Health Research. Vol. 3. Issue 5. May, 2017. P. 26-28.
- 5. Davlatov S.S., Rakhmanov K.E. Improved method of plasmopheresis in the treatment of cholemic endotoxicosis // Collection of scientific works of students and young scientists of the All-Russian scientific-practical conference with international participation. Yaroslavl. April 24-26, 2013. P. 148.
- 6. *Kasimov S. et al.* Haemosorption In Complex Management of Hepatargia: o27 (11-1) // The International Journal of Artificial Organs., 2013. T. 36. № 8.
- 7. Sulaymonovich D.S., Erdanovich R.Q., Yaxshiboyevich S.Z. & Akhrarovich S.U. (2020). Algorithm for the management of patients with bile duct after cholecystectomy. International Journal of Pharmaceutical Research. 12. 1008-1012. doi:10.31838/ijpr/2020.SP2.004.
- 8. *Saydullayev Z.Y. et al.* Evaluating the effectiveness of minimally invasive surgical treatment of patients with acute destructive cholecystitis // The First European Conference on Biology and Medical Sciences, 2014. P. 101-107.
- 9. Shamsiyev A., Davlatov S. A differentiated approach to the treatment of patients with acute cholangitis // International Journal of Medical and Health Research, 2017. P. 80-83.