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CURRENT APPROACHES TO DIAGNOSIS AND TREATMENT OF CHOLEDOCHOLITHIASIS IN ELDERLY AND ELDERLY PATIENTS

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Abstract:

In spite of significant progress in diagnostics and treatment, cholelithiasis (cholelithiasis) becomes more and more significant every year [1,2,4,9,14,17,26,32]. The ubiquitous growth tendency of morbidity and poor treatment results, especially in its complicated forms, determine the special social significance of this problem [10,11,16,27,33,35]. Diagnostics and treatment of cholelithiasis and its complications are also urgent problems.

Keywords: Choledocholithiasis, Old Age, Mechanical Jaundice, Cholelithiasis

INTRODUCTION.

In last decades along with wide spread of cholelithiasis its complicated forms, including choledocholithiasis, became more frequent [12,16,22,29,31]. Choledocholithiasis is often accompanied by persistent obstruction of bile ducts with subsequent development of mechanical jaundice, purulent cholangitis, acute pancreatitis. Mechanical jaundice in history or on admission as a manifestation of choledocholithiasis is diagnosed in 80-85% of patients, and in 40% of patients it persists by the moment of surgery, in 20% of patients cholangitis occurs, in 25% - pancreatitis [3,5,6,19,21,26,36]. Among choledocholithiasis sufferers the majority is elderly and senile age, which is often caused by long history of disease [1,10,20,26,30,35]. A distinctive feature of choledocholithiasis course in patients of these age groups is that it is often combined with primary destructive forms of gallbladder inflammation.

Cholecystectomy combined with intervention on extrahepatic bile ducts leads to negative results, because even opening of hepaticocholedochal lumen in elderly patients leads to 3-4 times more lethality [25,29,30]. The main factor contributing to high operational and anesthetic risk in elderly patients is heavy concomitant pathology \7,18,19,25,28\. Therefore, postoperative mortality in elderly patients with acute calculous cholecystitis averages 4-6%, and in complicated form it reaches 15-63% [10,15,23,28.31].

PURPOSE OF THE STUDY:

Improvement of diagnostics and treatment results of elderly and senile patients suffering from cholelithiasis complicated by choledocholithiasis by

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means of using rational methods of examination, modern methods and techniques of operative interventions.

MATERIAL AND METHODS:

During the period from 2015 to 2022 there were 6378 patients in the Andijan branch of the Republican Scientific Center of Emergency Medical Care about cholelithiasis and its complications. At admission to the hospital 1594 \25%\ of patients had suspicion of extrahepatic bile duct pathology. The patients ranged in age from 24 to 86 years. Men were 598 (37.6%) (women 62.4%). The main contingent of patients (1018-63,8%) was elderly and senile. Note that the elderly patients come to the clinic later from the beginning of the disease, so within the 1st day of hospitalization averaged 19.7-38.1% of patients, and after 3 days-35.7-41%.While collecting the anamnesis was clarified that this is associated with the age nature of the disease.

All elderly and senile patients on admission underwent general clinical, biochemical blood and urine tests, coagulogram, electrocardiography, lung X-ray, ultrasound examination (USI), hepatopancreatobiliary zone, Fibrogastroduodenoscopy (FGDS), endoscopic retrograde pancreatocholangiography (ERPCT), endoscopic papillosphincterotomy (EPST), if necessary, intraoperative cholangiography (IOCH), echocardiography (EchoCG) and computer tomography (CT).

According to biochemical study, 526 (51.6%) patients had bilirubin elevations in the blood in the range from 26.7 to 368.4 μmol/L, and on the average it was +3.6 μmol/L.

Ultrasound of liver, gallbladder and bile ducts is very important for diagnostics of extrahepatic bile duct pathology. Biliary duct stones are revealed in 42% of patients, 58% of patients have increased cholelithiasis up to 8 mm and more in diameter and other indirect symptoms of biliary obstruction - thickening, roughness of cholelithic walls contour, heterogeneous hyperechogenic inclusions. Esophagogastroduodenoscopy allows to revise upper organs of gastrointestinal tract as well as to evaluate condition of large duodenal papilla (LAD).

Gastric ulcer was found in 12/1,1% patients, duodenal ulcer was found in 21/2% patients as concomitant diseases and papillary diverticula were found in 109/10,9% patients. Significant progress in solving the problem of choledocholithiasis diagnosis is associated with the introduction of endoscopic retrograde pancreatocholangiography (ERCG). Currently (ERCG) has entered the daily surgical practice and has become the leading method of choledocholithiasis diagnostics.

The indications for (ERCG) are mechanical jaundice on admission or in anamnesis, dilation of common bile duct over 8 mm in diameter according to ultrasound investigation, acute biliary pancreatitis.

Endoscopic papillosphincterotomy (EPST) and concrements extraction is an operation of choice in patients of any age with choledocholithiasis. Often being an effective method of preoperative preparation, this surgery serves as an alternative to abdominal surgery and provides an opportunity to obtain optimal results in patients of such a severe group as elderly patients.

RESULTS AND DISCUSSION:

Out of 1018 elderly and senile patients 906 patients underwent endoscopic retrograde pancreatocholangiography (ERCPG). 112 patients failed ERCG because of impossibility to catheterize large duodenal papilla, cicatricial stenosis of large duodenal papilla, allergy to radiopaque agents and inadequate behavior.

Choledocholithiasis was revealed in 768 patients (84.7%), stenosis of choledocholithiasis in 41 patients (4.5%), combined choledocholithiasis with stenosis of terminal choledocholithiasis in 97 patients (10.7%). ERCG was performed once in 76.9% of patients, and twice in 33.9% of patients. EPST was performed in all patients with choledocholithiasis. Non-consecutive EPST was performed in 12 patients, from the ostium of VD in 7 patients, suprapapillary choledochotomy in 2 patients. 32,7% of patients with concrements more than 1.5 cm in diameter have significant difficulties in their removal from choledocholithiasis after EPST. After introduction of the method of mechanical lithotripsy into the clinic the percentage of endoscopic lithoextraction in patients with large choledochal stones has doubled. EPST in this category of patients was performed in 1 stage in 551-61% cases, in 355 39% of patients - in 2 stages. The average incision length for EPST was 15.5 +=1.3 mm.

During comparative analysis we noted that the probability of presence of concrements in bile ducts reliably increased with the age of patients. So out of 1594 complicated cholelithiasis patients\576\ aged up to 60 years old choledocholithiasis was found in 70 patients\4,2%\, and 830 patients over 60 years old\52,2%\. There is a direct correlation between the size of concrements and the age of patients. Thus, concrements greater than 1.5 cm in size were identified in 285 patients over 60 years old (17,8%),

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and in patients under 60 years old in 17 patients (1.1%). Analogously we can observe the increase of frequency of development of mechanical jaundice with the increase of patients' age; in patients under 60 years old - in 45,6% of cases, those over 60 years old - in 72,1% of cases. In elderly and senile patients with large size concrements in the biliary tract and in most cases with severe comorbidities, the use of EPST with mechanical lithoextraction requires using less traumatic options of EPST.

In 93 patients with choledocholithiasis (10.5%) endoscopic signs of purulent cholangitis were identified. In these patients ERCG was followed by EPST with lithoextraction and nasobiliary drainage for 5-6 days for bile ducts decompression and sanation.

According to our observation large-diameter concrements were found in 285 cases out of 1018 elderly and senile patients. Large and multiple stones in hepatico-choledocholedochus were always combined in patients with mechanical jaundice and purulent cholangitis.

In 98 patients with large-diameter stones in choledocha after EPST we made conversion-cholecystectomy-choledocholithotomy with choledocha external drainage. Lethality was not noted. During EPST in elderly and senile patients with choledocholithiasis, bleeding from the papillotomy wound was observed in 109/12.6% of 865 patients. In 36 \4.2% patients bleeding was stopped by endoscopic approach, in 73\8.4% patients bleeding stopped on their own, in 2 patients with severe bleeding due to ineffectiveness of endoscopic hemostasis the bleeding was stopped by conversion-suturing of bleeding vessels. Lethality was observed in 1 patient with recurrent bleeding.

When performing EPST the greatest difficulties were encountered in patients with papillary papilla shape, with stricture and deformity of LAD, with parapapillary and especially intradiverticular location of LAD. Two patients with intradiverticular location of LAD had choledochal wall damage and retroperitoneal perforation of the 12th intestine when papillotomy was performed. Laparotomy was performed, the wall was sutured with external drainage of the choledochus according to Cair and retroperitoneal perforation of the 12 fist intestine wall was sutured. Lethality in 1 patient with 12 fist intestinal suture failure, peritonitis, multiple organ failure.

CONCLUSIONS

1,Patients of elderly and senile age with cholelithiasis complicated by choledocholithiasis should be hospitalized in specialized centers for complete investigation and operative treatment.

2.In this category of patients, especially with large diameter of concrements in hepaticocholedochus and, in most cases, complicated by severe comorbidities, use of EPST with mechanical lithoextraction for choledochal sanation allows to use less traumatic versions of EPST in one stage.

3.In choledocholithiasis of elderly and old age, minimally invasive, minimally traumatic interventions should be used whenever possible

4. Possible complications of endoscopic surgery of biliary tracts can be prevented by precise observance of correct technique of surgical intervention especially in elderly and senile patients

LITERATURE.

1. Altyev B.K. Boynazarov I.Kh. Atadjanov Sh.K. Khoshimov M.A. Endoscopic interventions in treatment of recurrent and recurrent choledocholithiasis.Problems of clinical medicine.2007.№1(9).p -74-77.
2. Khamdamov B.Z. Indicators of immunocitocine status in purulent-necrotic lesions of the lover extremities in patients with diabetes mellitus.//American Journal of Medicine and Medical Sciences, 2020 10(7) 473-478 DOI: 10.5923/j.ajmm.2020.- 1007.08 10.
3. .Khaidarov Nodir Kadyrovich, Shomurodov Kahramon Erkinovich, &Kamalova Malika Ilhomovna. (2021). Microscopic Examination of Postcapillary Cerebral Venues In Hemorrhagic Stroke. The American Journal of Medical Sciences and Pharmaceutical Research, 3(08), 69-73.
4. Kamalova Malika Ilkhomovna, Islamov Shavkat Eriyigitovich, Khaidarov Nodir Kadyrovich. Morphological Features Of Microvascular Tissue Of The Brain At Hemorrhagic Stroke. The American Journal of Medical Sciences and Pharmaceutical Research, 2020. 2(10), 53-59
5. Vakhidov A.V., Shomirzaev B.N. Endoscopic surgery in treatment of patients with cholelithiasis complicated by obstructive jaundice.Materials of X1 Congress of surgeons of Belorussia 1995.p-162-163.
6. Vetshev P.S., Shulutko A.M., Shpachenko F.A. et al. Cholecystectomy from minidostomy in surgical treatment of cholelithiasis.Endoscopic surgery 2000;2:17.
7. Halperin E.I., Gromova I.V., Zubareva L.A. et al. Choledocholithiasis-endoscopic possibilities

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Available Online at: https://www.scholarexpress.net
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ISSN: 2749-3644

of its resolution.Annals of Hepatol1998;3(3):46-47.
8. Golubev A.G.,Vilkov A.V.,Davydkin V.I. Puncture decompression of gallbladder in acute obstructive cholecystitis.Annals of chir. hepatol2003;2:281-282
9. Dasaev AN,Gebel TJ,Petukhov ND et al. New technologies and old problems in surgery of cholelithiasis.Annals of Chir Hepatol 2002;7(1):104.
10. Ermolov A.S., Gulyaev A.A., Ivanov P.A. Surgical treatment of cholelithiasis in patients with high surgical risk. Annals of Chir Hepatol2002;7(1):108.
11. Karimov Sh.I. Minimally invasive interventions in treatment of choledocholithiasis. Annals of Chir Hepatol 2000:5(2):32-35
12. Karmazanovsky G.G., Fedorov V.D. CT of pancreas and retroperitoneal organs.M Paganel 2000;311.
13. Kasumyan S.A.,Nekrasov A.Yu.,Sergeev A.V. et al.Variants of algorithm of diagnostic and therapeutic measures at acute cholecystitis in patients with high operation risk. Annals of Chir Hepatol 2002;7(1):115.
14. Kozlov A.N., Khoreev A.A., Chumakov A.A. et al.Maloinvasive treatment of acute cholecystitis in patients with high surgical risk.Annals of Chir Hepatol 2002;7(1):115.
15. Klimenko G.A. Choledocholithiasis.M Medina 2000;230.
16. Kuznetsov N.A., Semenova T.V., Kharitonov S.V. The role of ultrasonic Dopplerography in the diagnosis of calculous cholecystitis.Modern problems of practical surgery 2000;101-109.
17. Lutsevich E.V., Belov I.N. Endoscopic surgery: origins and present. Pirogov Surgery 1996;1:39-41.
18. Malyarchuk V.I., Rusanov V.P., Dolgov D.L. et al. Decrease in the risk of complications during laparoscopic cholecystectomy from the side of the respiratory and cardiovascular systems in elderly and senile patients. Endoscopic surgery 2000;2:42.
19. Nazarenko N.A.Clinical and functional evaluation of papillosphincterotomy. Autoref. D. candidate of medical sciences.M., 1981-26s.
20. Nazirov F.G., Khadjibaev A.M., Altyev B.K. et al. Surgery in injuries and strictures of bile ducts. Surgery. Pirogov's Journal of N.I. 2006;4:46-48.
21. Nechai A.I., Stukalov V.V., Nechai I.A. Recognition of stones in unexpanded bile ducts. Surgery 1997;6:33-36.
22. Nishanov K.T., Kim V.L., Nazarov B.T., Erkaboyev Z. Surgical tactics in destructive cholecystitis in patients with increased surgical risk. Annals of Chir Hepatol 2002;7(1):136.
23. Pikovsky D.Y., Ker G., Fedorov S.P. Biliary tract surgery: past and present.Annals of Surgical Hepatology.1996.vol.1.p.136-143.
24. Saakyan N.E., Bagdasarov G.A., Zinyakova M.V. The role of rational surgical tactics in improving treatment outcomes of patients with acute cholecystitis.Analysis of lethality in acute cholecystitis according to materials of Moscow hospitals.1999;20-24.
25. Endovisual interventions in complicated forms of cholelithiasis.Bulletin of urgent medicine, 2008.
26. Khojeboev A.M. Mini-invasive methods of treatment of complicated forms of acute calculous cholecystitis in elderly and senile patients. Bulletin of Emergency Medicine,2010,¹4.94-98.
27. Khojiboev A.M.,Alijanov F.B., Vahidov A.B. et al.New technologies in treatment of destructive cholecystitis. Annals of Chir Hepatol 2003;2:362-363.
28. Shestakov A.L., Yurasov A.V., Movchun V.A., Timoshin A.D. Minoinvasive methods of treatment of cholelithiasis complicated by common bile duct disease. Surgery 1999;2:29.
29. Adamek H.E., Maier M., Jacobs R. et al. Management of retained bile duct stones; a prospective open trailcomparing extracorporeal and intracorporel lithotripsy// Gastrointest. Endoscopy-1996.-Vol. 44, 1-P. 40-47.
30. Becer C.D.,Grosshols M., Becker M. Et al. Choledocholithiasis and bile duct stenosis; diagnostic accuracy of MR cholangiopancreatography. Radiology 1997;205[2];52
31. Daou R. Cholecystectomie par mini-laparotomie. Ann Chir 1998;52 [7]; 625-628
32. Gaetini A., Camandona M., De Simone M., Giaccone M. Minilaparotomie per colecistectomia. Minerva Chir 1999; 52 [1-2] 13-16.
33. Grau-Talens E.J., Garcia-Olives F., Ruperez-Arribas M.P. Transcylindrical cholecystectomy; new technique for minimally invasive cholecystectomy. World J Surg 1998; 22 [5]; 453-458.

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-10, MAY 2022
ISSN: 2749-3644

34. Lauj.V.W., Leow C.K., Fung T.M.et al. Cholecystectomy or Gallbladder in Situ After Endoscopic Sphincterotomy and Bile Duct Stone Removal in Chinese Patients. Gastroentorology, January 2006; 130; 96-103.
35. Lippert H. Antimicrobial prophilaxis in laparoscopic and conventional cholecystectomy. Conclusions of a large prospective multicenter quality assurance studi in Germani.Chemotheraphy 1998; 44;355-363.
36. Chopra K. B., Peters R. A., O'Toole P. A. et al. Randomised study of endoscopic biliary endoprosthesis versus duct clearance for bileduct stones in high-risk patients// Lancet.-1996-Vol 348 9030.-P. 791-793.
37. Shimizu S., Tada M., Kawai K. Diognostic endoscopic retrograde cholangiopancreato-graphy. Endoscopy 1996; 28; 107-112.