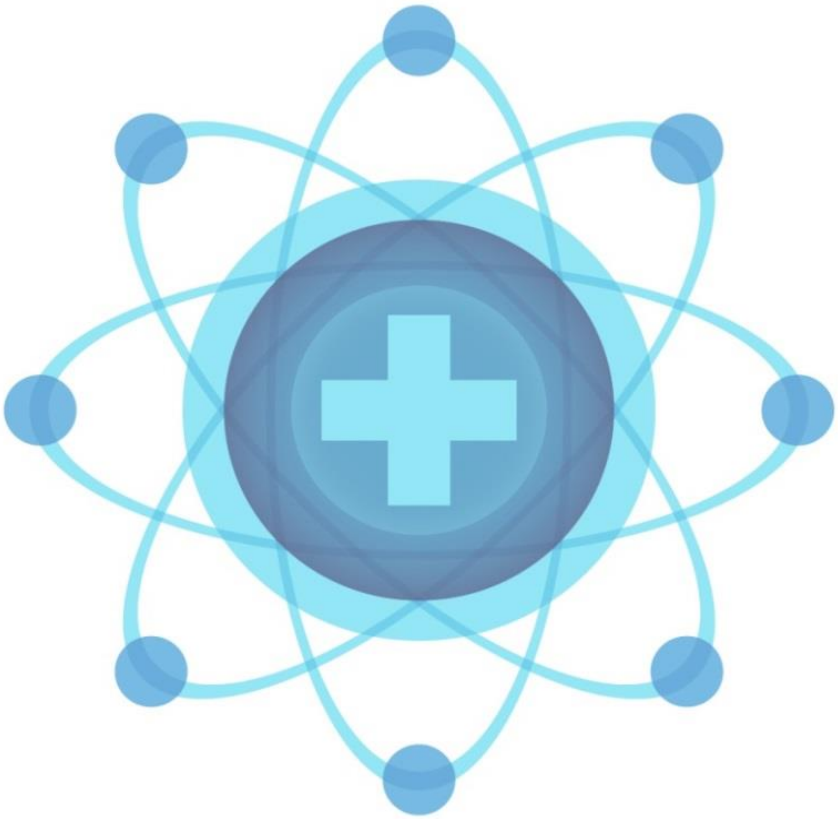

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SURGICAL INTERVENTIONS IN ACUTE CALCULOUS CHOLECYSTITIS IN ELDERLY AND SENILE PATIENTS

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Abstract. Diagnosis, treatment and rehabilitation of patients with cholelithiasis (GSD) remain one of the urgent problems of surgery. Among the various diseases of the biliary system, cholelithiasis occupies 50-65%. According to most researchers, almost every fifth woman and every tenth man suffers from gallstone disease. The surgical method of treatment, being pathogenetically substantiated, retains its leading position. The operation to remove the gallbladder - cholecystectomy - is currently considered as the operation of choice for inflammatory and other diseases of the gallbladder.

Keywords. acute calculous cholecystitis, surgical treatment, mild.

The severity of the condition of elderly and senile patients with acute calculous cholecystitis is due to complications of the underlying disease and concomitant diseases (1,4,5,6,7,10,13,14). In this category of patients, the "mutual burden syndrome" manifests itself, when, as a result of an attack of acute cholecystitis and subsequent intoxication, decompensation of concomitant diseases occurs, which in turn leads the patient to an inoperable, from the point of view of a radical operation, condition (2,3,8,9 ,11,12).

In this regard, it seems to us of paramount importance to evaluate the options for surgical methods for the treatment of acute calculous cholecystitis in elderly and senile patients.

To achieve the desired goal, we conducted a retrospective analysis of the results of treatment of patients, united by a tactical approach in the diagnosis and in the complex surgical treatment of acute calculous cholecystitis in elderly and senile patients.

MATERIAL AND RESEARCH METHODS

The clinical material was analyzed, consisting of 102 patients with acute calculous cholecystitis of elderly and senile age, who were examined and treated in the Bukhara regional branch of the Republican Scientific Center for Medical Emergencies of the Ministry of Health of the Republic of Uzbekistan.

When analyzing a set of criteria for assessing the clinical manifestation of acute calculous cholecystitis in elderly and senile patients, it was found that 41 (40.2%) patients were admitted to our clinic with mild acute calculous cholecystitis. After 24 hours from the moment of admission to the clinic, after the necessary examination, 23 (22.5%) patients were operated on. The remaining 18 (17.6%) patients underwent trial

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conservative therapy, which did not give the desired effect. Accordingly, after prolongation of the examination period and conservative treatment of these patients, all of them were transferred to the category from the mild degree of acute calculous cholecystitis to the group with moderate severity. According to current recommendations in the category of patients with moderate severity of acute calculous cholecystitis, laparoscopic surgical treatment (LCE) should be performed with extreme caution (11).

In 43 (42.2%) patients, the average severity of acute calculous cholecystitis was diagnosed. Among them, 24 (23.5%) patients were elderly and 19 (18.6%) were senile. Severe severity of the course of acute calculous cholecystitis was characterized by the presence of organ dysfunction (failure) of 1 or more organs of the cardiovascular system, respiratory system, central nervous system, kidneys, liver, and the presence of thrombocytopenia.

To assess the severity of the condition and the dynamics of the course of the pathological process in patients with acute calculous cholecystitis in the elderly and senile age, we used the Tokyo recommendations. The comorbidity index was determined by the Charlson method. The assessment of the physical status of patients was carried out according to the scale of the American Association of Anesthesiologists. The complexity of LCE and the need for conversion were assessed according to simplified criteria by V.V. Zvyagintsev.

RESULTS AND ITS DISCUSSION

Surgical methods for the treatment of acute calculous cholecystitis in elderly and senile patients included the choice of the method and access of cholecystectomy between laparoscopic (LCE), mini-laparotomic access (MCE) or traditional laparotomy (CCE). Of course, preference was given to LChE, but if this intervention was difficult to perform, a conversion was made with the completion of its MChE or OChE. Accordingly, when analyzing the results of surgical methods of treatment, we took into account only the final variants of the interventions performed.

In 73.5% of cases, the removed gallbladder was destructive. At the same time, among the elderly patients, the phlegmonous nature of the gallbladder lesion was predominant (26.5%), while among the elderly patients it was gangrenous (19.6%).

The majority (82.6%) of patients with mild acute calculous cholecystitis had catarrhal and phlegmonous cholecystitis. All of them were among elderly patients. In the subgroup of patients of senile age, there was only 1 patient with gallbladder empyema. Gallbladder empyema among elderly patients was detected in 3 (75%) patients.

In the subgroup of patients with acute calculous cholecystitis of mild severity, LCE prevailed with a significant margin, which were performed in 82.6% of patients.

Minilaparotomic cholecystectomy (MCE) was performed in 2 elderly patients. Another 2 patients underwent cholecystectomy from upper median laparotomy (ACE). The decision to perform this type of operation was the presence of a pronounced

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adhesive process in the area of cicatricial deformity of the gallbladder neck, which was detected at the beginning of the operation by a minimally invasive method.

The nature of the distribution of the level of complexity of cholecystectomy in the group of patients with mild severity of acute calculous cholecystitis showed (Table 1) that operations with I and II degrees of complexity prevailed (65.2% and 26.1%, respectively).

Table 1

The nature of the distribution of the level of complexity of cholecystectomy in the group of patients with mild severity of the course of acute calculous cholecystitis

TYPE OF OPERATION	DIFFICULTY OF CHOLECYSTECTOMY								TOTAL	
	I		II		III		IV			
	АЧ	%	АЧ	%	АЧ	%	АЧ	%	АЧ	%
LHE	12	63,2	5	26,3	2	10,5	0	0	19	82,6
MCE	2	100,0	0	0	0	0	0	0	2	8,7
OKHE	1	50,0	1	50,0	0	0	0	0	2	8,7
TOTAL	15	65,2	6	26,1	2	8,7	0	0	23	100

Difficulties III degree during cholecystectomy occurred in 2 patients due to the presence of dense subhepatic infiltrate, necrosis of the gallbladder wall with its fragmentation. However, technical difficulties are fundamentally capable of affecting the possibility of using LCE.

An analysis of the frequency of cholecystectomy of varying complexity depending on the duration of the disease in patients with acute calculous cholecystitis of mild severity showed that the safest time for cholecystectomy during the first 72 hours from the onset of the disease should be considered the maximum allowable.

With moderate severity of the course of acute calculous cholecystitis, destructive forms of the gallbladder were diagnosed to a greater extent (69.8%). From the general group, the gangrenous form of acute calculous cholecystitis was predominant (44.2%).

In terms of age, 24 (55.8%) patients were elderly and 19 (44.2%) were senile. We deliberately focus on this phenomenon, which differs from the mild severity of the course of the disease, where the absolute predominant number of patients was the elderly. At the same time, the gangrenous form of acute calculous cholecystitis, which is one of the characteristic criteria for the moderate severity of the course of the disease, was predominant in both elderly and senile patients.

In second place in terms of frequency of occurrence in the subgroup of elderly patients were lesions of the gallbladder in the form of acute catarrhal cholecystitis (8 cases). Retrospectively, it can be stated that all of them were in this subgroup of patients

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with a moderate severity of the disease due to a stormy clinical picture and a high level of leukocytosis. At the same time, phlegmonous forms of acute calculous cholecystitis were registered in the same number among senile patients.

When analyzing the volume of surgical interventions performed in patients with moderate severity of acute calculous cholecystitis, a total of 43 surgical interventions were performed.

As in the general group and in the previous analyzed subgroup, in this case, also, among the prevailing were patients who underwent LCE (58.1%). However, this figure was 24.5% less than among patients with mild severity of acute calculous cholecystitis.

In 18 patients, the started LCE was completed by laparotomy. In 25.6% of cases, MCE and in 16.3% - AChE. In general, this was 24.5% more than in the previous analyzed subgroup of patients.

Analysis of the distribution of the level of complexity of cholecystectomy in the group of patients with moderate severity of acute calculous cholecystitis showed (Table 2) that operations with III and IV degrees of complexity prevailed (25.6% and 44.2%, respectively).

Only 24% of LCE were I degree of complexity. In 68% of cases they were grades III and IV. Among MCEs, the complexity was grade IV in almost half of the cases. As for AChE, the complexity of the situation was noted in 71.5% of cases of IV degree.

Table 2

The nature of the distribution of the level of complexity of cholecystectomy in the group of patients with moderate severity of the course of acute calculous cholecystitis

TYPE OF OPERATION	DIFFICULTY OF CHOLECYSTECTOMY								TOTAL	
	I		II		III		IV			
	AF	%	AF	%	AF	%	AF	%	AF	%
LHE	6	24,0	2	8,0	8	32,0	9	36,0	25	58,1
MCE	3	27,3	0	0,0	3	27,3	5	45,5	11	25,6
OKHE	1	14,3	1	14,3	0	0,0	5	71,4	7	16,3
TOTAL	10	23,3	3	7,0	11	25,6	19	44,2	43	100

As we have already stated, in 36 patients with acute calculous cholecystitis, a severe course of the disease was diagnosed. Pathological picture of the gallbladder in

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100% of cases was destructive. Gangrenous gallbladders (61.1%) prevailed over phlegmonous (38.9%) almost 2 times.

At the same time, in elderly patients, almost all cases were phlegmonous (92.9%), while more than half of patients with gangrenous form of acute calculous cholecystitis were diagnosed in senile patients.

In 44.4% of cases, the planned LCE ended without conversion. However, in 55.6% of cases, surgical treatment had to be switched to MChE (38.9%) or to AChE (16.7%).

To a greater extent, conversions were completed by MChE (38.9%), and to a greater extent among elderly patients (57.1%). Meanwhile, the completion of CCE conversion prevailed among elderly patients more significantly than with MCE (66.7%). In this case, there is a repetition of the cases stated above, in particular, the blurring of the clinical picture and the complexity of the surgical intervention has a certain dependence on the age category of patients. Apparently, this aspect characterizes precisely the patients of elderly and senile age.

The nature of the distribution of the level of complexity of surgical interventions performed in patients with severe course of acute calculous cholecystitis shows the predominance of IV degree of complexity (table 3). The prevailing difficulty was in performing LCE (33.3%). At the same time, among LCE, 25% of cases fell on the III degree of complexity of surgical intervention. It is noteworthy that I and II degrees of complexity of LCE in patients with severe severity of the course of acute calculous cholecystitis were not noted by us.

Table 3

The nature of the distribution of the level of complexity of cholecystectomy in the group of patients with severe severity of the course of acute calculous cholecystitis

TYPE OF OPERATION	DIFFICULTY OF CHOLECYSTECTOMY								TOTAL	
	I		II		III		IV			
	Af	%	Af	%	Af	%	Af	%	Af	%
LHE	0	0	0	0	4	25,0	12	75,0	16	44,4
MCE	2	14,3	2	14,3	6	42,9	4	28,6	14	38,9
OKHE	1	16,7	2	33,3	3	50	0	0	6	16,7
TOTAL	3	8,33	4	11,11	13	36,11	16	44,44	36	100

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Among surgical interventions with MCE, III degree of complexity prevailed (42.9%). To a lesser extent, there were patients with IV degree of complexity (2 times less than degree 3). Isolated cases of I and II degree of complexity of the MCE operation were in the same proportion. An even half of the OChE were of the III degree of complexity. The remaining operations of this volume fell on the I and II degree of the operation.

In general, it should be noted that the largest number of operations were of a complex degree (80.55%). Often, of course, this was associated with destructive changes in the gallbladder, as in the previous case. However, the presence of technical difficulties of I and II degrees indicates that the predominant nature of such changes is associated to a greater extent with the preoperative severity of the patients' condition.

The nature of the complex surgical treatment of acute calculous cholecystitis in elderly and senile patients, under the conditions of gradation age analysis, made it possible to identify a number of theoretical patterns.

The dependence of the degree of complexity of surgical intervention on the severity of the course of acute calculous cholecystitis is known (1,10,11). In our research, it is not reliable. In most cases, a similar peak value in this rank appears among patients with moderate severity of acute calculous cholecystitis. The ranking of patients in this subgroup between mild and severe severity of the course of the disease does not allow achieving compliance with the planned type of surgical intervention. In our research, this is confirmed by a high level of conversion cases and an increase in the share of the degree of complexity.

It seems to us that confirmation of this conclusion is possible only under the condition of an objective assessment of the results of the complex of surgical methods for the treatment of acute calculous cholecystitis in elderly and senile patients. In particular, the analysis of complications and mortality among these patients is of interest. This aspect of the clinical material is at the stage of analysis and will be presented in our next publications.

CONCLUSIONS

1. Preoperative assessment of the condition of patients in almost half of the cases does not coincide with the planned methods of surgery. Technical difficulties and the occurrence of intraoperative complications contribute to an increase in the proportion of surgical intervention trauma.

2. LCE operations in patients with moderate severity of acute calculous cholecystitis were impossible in almost half of the cases. A large proportion of discrepancies in plans when performing one or another variant of the operation indicates a low reliability of the preoperative assessment of the general condition of patients, identifying the degree of local inflammatory reaction with its subsequent generalization.

3. Cases of LChE conversion were significant. In fact, laparoscopy in this category of patients in almost half of the cases has acquired a diagnostic character. The discrepancy between the preoperative prognosis of the pathomorphological structure of

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the gallbladder, the blurring of the clinical picture of complications of acute calculous cholecystitis, contributed to the emergence of "force majeure" circumstances requiring a change in surgical techniques. This, in turn, once again confirms the need to use more objective methods for assessing the manifestation and development of the inflammatory response in patients, both elderly and senile.

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