

Causes and Treatment of Acute Cholecystitis in Khost Teaching Hospital in Age Group of 30 to 80 Years during the Year of 2019

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ABSTRACT

Background: The presence of gall stones in the biliary system, especially in the gallbladder, can cause serious problems.

Objective: The aim of the present study was to study the pattern and frequency of acute inflammation of the gall bladder on patients aged 30 to 80 years in Khost Teaching Hospital in the year 2019.

Material and Methods: In this retrospective research, the patients who were suffering from gall bladder inflammation, and all 51 patients who have been referred to the surgical department of Khost Teaching Hospital for gallbladder inflammation in the last year 2019, and their ages are 30 to 80 years old, were involved after taking prior government approvals.

Results and Discussion: According to pathology, in this study from a total of 51 patients, 90% of causes were stones for acute inflammation of gall bladder (GB), hydrops type of GB was 4%, and inflammatory calculus cases were 6%. Compared to other surgical cases, GB-inflammation corresponds to 4%. The occurrence of the disease is in the age of 41 to 50 years and is most common in the female gender. We have done for all cases, open surgery, and in four cases, included cholecystectomy common bile duct (CBD) exploration was also done. Complications were rare and occurred as bile leakage and bleeding. That mortality is less. 48 (94%) causes of inflammation were stones and hydrops type, and 3 (6%) causes were without stones.

Conclusion: This research shows that gallbladder inflammation is more common in urban areas, and the inflammation of the gallbladder is more common in the presence of stones than in non-stones.

Keywords: Acute inflammation, Gallbladder, Obstruction, Stones, Surgical treatment.

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INTRODUCTION

The presence of gall stones in the biliary system, especially in the gallbladder, can cause serious problems. Interference causes the function of the gallbladder and the blood flow in the bladder to be disrupted, leading to complications, such as, suppuration, gangrene, and perforation of the bladder. Also, the closure of the bile ducts can lead to cholangitis, which is a dangerous and deadly condition.^[1] As it is known, in most countries of the world, the level of public awareness is high due to on-time diagnosis and treatment before the onset of the complications, gall stones, and inflammation are treated, but many patients in our country Afghanistan still suffer from this disease. Research is being conducted by health personnel and the general public to understand the serious consequences of this disease. A study, conducted at the surgical unit-I, Jinnah Postgraduate Medical Center (JPMC) in Pakistan, involved approximately 100 patients, of whom 73 were women, and 27 were men, and the ratio was approximately 3:1. The average age was 22 to 72 years old, which means 48%. 42% of patients were over 50 years old, 32% were 41 to 50 years old, 22% were 31 to 40 years old, and only 4% were under 30 years old. Pain was a common complaint in 97 patients. The pain location was the right-hypochondrium, left-hypochondrium, or epigastric region. Three patients had no history of abdominal pain. The next major complaint was dyspepsia in 73 cases, followed by

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nausea and vomiting in 71 cases.^[2] Another study was done on approximately 100 patients with acute cholecystitis surgery at the Regional Institute of Medical Sciences Hospital, Imphal, Manipur, India, in 2016, admitted for surgery. Up to 45% were between 41 and 60 years old, 37% were between 21 to 40 years old, 13% were between 61 and 80 years old, and 5% were up to 20 years old. The family history of acute cholecystitis in this study was present in only 10% of cases, and no family history in the remaining 90%.^[3]

MATERIAL AND METHOD

In this retrospective study, the patients who are suffering from gallbladder inflammation and all (51) patients who have been referred to the surgical department of Khost Teaching Hospital for gallbladder inflammation in the last year 2019, and their ages are 30 to 80 years old. It is worth mentioning

that in this study, out of 51 patients, 4 who also had CBD blockade, I gave a brief and comparative description, which I considered important.^[4]

Inclusion Criteria

In this study, patients with acute inflammation of the gallbladder, who have been bedridden with a probable and definitive diagnosis over a period of 1-year, and are aged between 30 and 80 years.

Exclusion Criteria

All patients who have been hospitalized for other illnesses, such as, a patient diagnosed with peptic ulcer or pancreatitis, but then have acute cystitis diagnosed, and all patients under 30 years of age.

Method of Data Collection

Initially, all the files were taken from the medical records with the official permission of the hospital directorate for investigation, and after receiving the required information, the files were returned to the medical records.^[5,6]

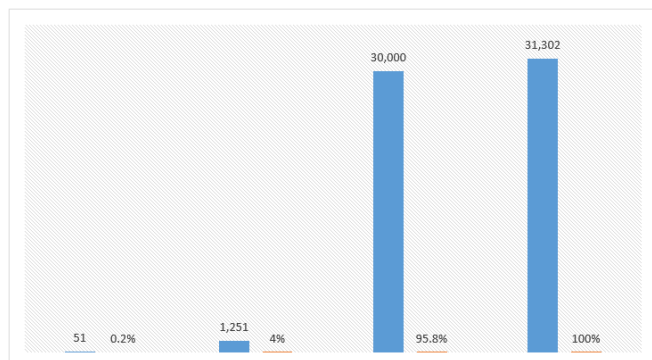


Figure 1: Comparison of the total number of patients who underwent surgery, and those who underwent surgery for gallbladder surgery

Table 1: Comparison of the total number of patients who underwent surgery, and those who underwent surgery for gallbladder surgery

	Operated and admit patients	Operated patients for cholecystitis	OPD and emergency room patients	Total
Number	1,251	51	30,000	31,302
Percentage (%)	4	0.2	95.8	100

Table 2: General comparative assessment of all patients under evaluation in all, based on existing pathology

Pathology	Acute cholecystitis with stones	GB-stones and CBD stones	Hydrops	Acute cholecystitis without stones	Total
Number	42	4	2	3	51
Percentages (%)	82.3	7.7	4	6	100

Table 3: Influence of age

Age (in years)	Number	Percentages (%)
30-40	12	23.7
41-50	26	51
51-60	11	21.5
61-70	1	1.9
71-80	1	1.9
Total	51	100

RESULTS AND DISCUSSION

The results of the research work are presented in the form of Tables 1-3 and Figures 1-3 so that they can be easily analyzed and compared. The total number of patients who came to the General Surgery Department of Khost Provincial Hospital was 31,302, out of which, 1,251 were operated and admitted patients, including 51 patients with gallbladder surgery, the table is as follows.

The above Table 3 and Figure 3 show that gallstones and related diseases are most common in people aged 41 to 50, with the lowest incidence being in people over 60 years of age.

Table 4 and Figure 4 show that most incidences of the disease are in the female gender.

Table 5 show that the majority of cholecystectomy was performed in the form of open, and only four patients had

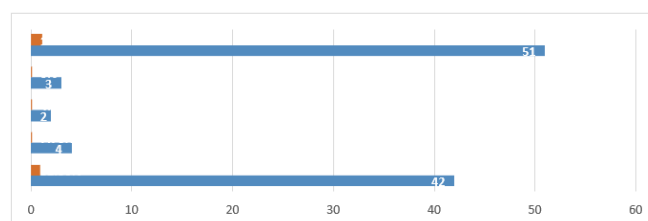


Figure 2: General comparative assessment of all patients under evaluation in all, based on existing pathology

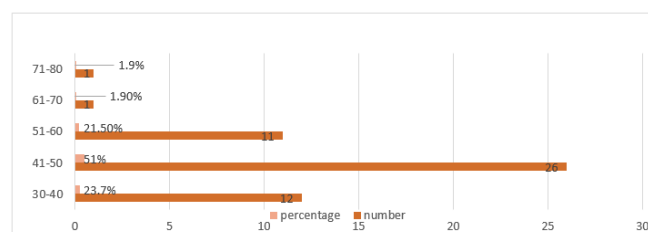


Figure 3: Influence of age

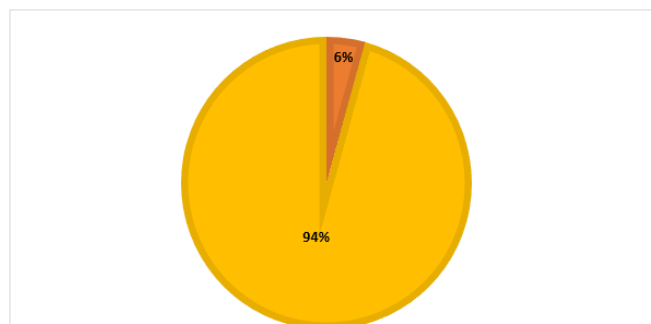


Figure 4: Patient assessments by gender

Table 4: Patient assessments by gender

Patients according to sex		
	Female	Male
Number	48	3
Percentages (%)	6	

Table 5: Patient view of treatment

Operation types	CBD exploration and cholecystectomy	Open cholecystectomy	Total
Number	4	47	51
Percentages (%)	7.85	92.15	100

Table 6: Comparison

Comparison table					
Number and percentages	Foreign research (100 patients)	Number and percentages	Foreign research (100 patients)	Observed numbers and percentages (51 patients)	
Above 50 YOD (42%)	Inflammation of the gallbladder according to age	41–60 YOD 45% (45)	Inflammation of the gallbladder according to age	41–50 YOD 26 (51%)	Inflammation of the gallbladder according to age
Female 73 (73%) Male 27 (27%)	Inflammation of the gallbladder according to sex	Female 72 (72%) Male 28 (28%)	Inflammation of the gallbladder according to sex	48 (94%) female 3 (6%) male	Inflammation of the gallbladder according to sex
60 (60%) open	Inflammation of the gallbladder according to procedures	100 (100%) open	Inflammation of the gallbladder according to procedures	Open cholecystectomy 51 (100%)	Inflammation of the gallbladder according to procedures

cholecystectomy combined with common bile ducts surgery as well that had CBD stones in four patients and T-tube was applied.

CONCLUSION

The study, conducted at a teaching hospital in Khost over a one-year retrospective period, looked at a total of 51 patients with gallbladder inflammation, including 94% females and 6% males. The comparative study result as presented in Table 6 showed that the majority of cases are in the age group of 41 to 50 years. All of these can be caused by 5 F (fat, female, fair, forty or family history, and fertile), and clinically overall patients had right upper abdominal pain and other symptoms, such as, mild fever and others are present in a small percentage.

- Study shows that the incidences of gallbladder inflammation is more at 41 to 50 years old, and are same as in literature.
- Study shows that cholecystitis is more common in women (94%) compared to literature.
- Study compared to the literature shows that gallbladder operations are often laparoscopic in most countries, but the second study shows that the majority of operations are performed in an open form, which is similar to my research (mostly in our country with limited equipment and specialists); the operation is performed in open form.
- Compared to the literature, the laparoscopic complications are higher than in the open and are the same as found

in this study.

- Study also shows that gallbladder inflammation is more common in urban areas.
- Research has shown that inflammation of the gallbladder is more common in the presence of stones than in non-stones.

A study of acute gallbladder inflammation concluded that the incidence of gallbladder inflammation was lower than other surgical cases at 4%, and the incidence was 94% in women and 6% in men. Most of the cases were in age 41 to 50 years old, and then in age 51 to 60 years old. Gallbladder inflammation is usually treated surgically in other countries, often by laparoscopy, but in our country, especially in the provinces, the possibility is limited, so everywhere are operated as open cholecystectomy. Complications of such surgeries are rare, and surgical procedures are considered safe.

Suggestions

- As ultrasound examination is a precise diagnostic tool, safe and easy to use, it is suggested that ultrasound departments should be available in all teaching hospitals, especially for surgeons.
- In order to diagnose and differentiate complex and complicated cases, it is recommended to provide modern diagnostic and treatment tools, such as, MRI, CT-Scan, endoscopy, and other equipment to other surgeons.
- All physicians, especially general surgeons, are advised to make every effort to complete the patient's file, obtain an accurate history.

- It is also suggested that the Ministry of Higher Education facilitates better research.
- It is proposed to the Ministry of Higher Education to create a climate of trust between doctors and patients so that patients do not have to travel abroad for their treatment, and to set up well-equipped laboratories in government hospitals to solve the problem of patients.
- It is proposed to facilitate the participation of doctors in national and international conferences and seminars.
- Liaison system between provincial and central hospitals and revitalization of refer system in the relevant specialized departments between these hospitals.
- A public awareness system should be introduced at the community level to allow more patients to go to the hospital first and reduce complications.

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