

Study of Cholecystitis in Telangana Population

Khaja Abdul Muqet¹, T V Ramanachary²

¹Associate Professor, Department of General surgery, Medici Institute of Medical Sciences, Hyderabad, Telangana, India,

²Assistant Professor, Department of General surgery, Medici Institute of Medical Science, Hyderabad, Telangana, India

Abstract

Introduction: Cholecystitis is a potentially life-threatening condition which affects >20 million globally every year. Gall bladder (GB) stones are the major contributor to acute cholecystitis (AC).

Materials and Methods: Eighty-six patients (32 males and 54 females) aged between 25 and 60 years who were regularly visiting Medici Institute of Medical Science Hospital having symptoms of cholelithiasis were selected for study.

Results: The clinical manifestation was 100% tenderness in right hypochondrium, 28 (32.5%) had fever, 6 (6.97%) had jaundice, 23 (26.7%) had vomiting, and 29 (33.7%) had leukocytosis. The mode of presentation was as follows: 14 (16.2%) had emergency and 72 (83.7%) had elective presentation, and types of pathology were as follows: 75 (87.2%) had calculus cholecystitis and 11 (12.7%) had idiopathic. The organism cultured post-surgically were as follows: 29 (33.7%) had *Escherichia coli*, 14 (16.2%) had *Staphylococcus aureus*, 6 (6.97%) had *Salmonella*, 13 (15.1%) had no organism, and 24 (27.9%) were not done culture due to early healing. This pragmatic approach to the patients with different clinical manifestation with different organism culture study at different age in both sexes will be quite useful to surgeons and physicians to treat efficiently cholecystitis to prevent morbidity and mortality.

Conclusion: Clinician at various levels needs to have good understanding of varied clinical presentations of AC, silent (chronic) cholecystitis, and different management options, their pros and cons to be able to treat the conditions effectively.

Key words: Acute cholecystitis, Gallbladder stone, Laparoscopic cholecystectomy, Telangana

INTRODUCTION

Cholecystitis is a potentially life-threatening condition which affects >20 million globally every year.^[1] Gall bladder (GB) stones are the major contributor to acute cholecystitis (AC). Laparoscopic cholecystectomy (LC) is an important approach for treating AC.^[2] Although lichen sclerosus has been extensively performed to manage AC, the optional timing of LC in this condition,^[3] but conventionally, higher rate of morbidity such as bile duct injury, leakage and conversion to open surgery, and the delayed LC is defined as at least 1 week after initial conservative treatment is commonly adopted in treating AC.^[4] It was identified that there is no such difference early or delayed approach, but there were post-surgical

complications, delayed healing, and long-term stay in hospital was observed in cholecystitis patients. Hence, attempt was made to evaluate the difference clinical manifestations of different age and in both sexes.

MATERIALS AND METHODS

Eighty-six patients (32 males and 54 females) aged between 25 and 60 years who were regularly visiting Medici Institute of Medical Science Hospital having symptoms of cholelithiasis were selected for study.

The radiological and biochemical test were carried out to confirm the cholecystitis. The patients having malignancy and HIV were excluded from the study.

- The ratio of female and male patients was 2:1
- The duration of study was about 4 years.

OBSERVATION AND RESULTS

Table 1: Clinical manifestations the patients with cholecystitis.

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Corresponding Author: Dr. T V Ramanachary, Assistant Professor, Department of General surgery, Medici Institute of Medical Science, Hyderabad - 501 401, Telangana, India.

- A. Tenderness in the right hypochondrium cholecystitis was 86 (100%), 28 (32.5%) had fever, 6 (6.97%) had jaundice, 23 (26.7%) had vomiting, and 29 (33.7%) had leukocytosis.
- B. Mode of presentation – 14 (16.2%) had emergency cholecystitis and 72 (83.7%) elective presentation.
- C. Types of pathology – 75 (87.2%) had acalculous cholecystitis and 11 (12.7%) had idiopathic calculus.

Table 2 study of post-surgical organism culture 29 (33.7%) had *Escherichia coli*, 14 (16.2%) *Staphylococcus aureus*, 6 (6.97%) had *Salmonella*, 13 (15.1%) had no organism, and 24 (27.9%) culture was not done due to early healing of wounds.

DISCUSSION

The present study of cholecystitis in the Telangana population – 100% patients had tenderness in right hypochondrium, 28 (32.5%) had fever, 6 (6.97%) had jaundice, 23 (26.7%) had vomiting, and 29 (33.7%) had leukocytosis. The mode of presentation – 14 (16.2%) had emergency and 72 (83.7%) elective presentation. The types of pathology – 75 (87.2%) acalculous cholecystitis and 11 (12.7%) had idiopathic calculus [Table 1]. The organism cultured post-surgically were 29 (33.7%) had *E. coli*, 14 (16.2%)

had *S. aureus*, 6 (6.97%) had *Salmonella*, 13 (15.1%) had no organism, and 24 (27.9%) culture was not done due to early healing of wound [Table 2]. These findings were more or less in agreement with previous studies.^[5-7]

A thorough clinical assessment and a high index of suspicious of AC are essential in any patients who presents with acute right upper quadrant pain and fever. Other clinical conditions that mimic AC includes appendicitis, gastritis, pancreatitis, acute myocardial infarction right lower lobe pneumonia, and right renal colic. Fever right upper quadrant pain with Murphy’s sign is well-established signs and symptoms of AC.^[8]

Ultra sonographic has been used to detect GB stones nowadays because the echogenic features of AC cannot be differentiated from stone in AC from those in chronic cystitis or silent (asymptomatic) GB stone. GB wall thickening is sometimes used as evidence of AC.^[9] However, wall thickening is not specific for AC and is found patients with hypoalbuminemia, ascites, 10–45% patients with chronic cholecystitis or partially or completely contracted normal gallbladders, and only about 45% of patients with AC.^[10] The early laparoscopic surgery was recommended in cholecystitis to prevent wound infection and shortens the stay in the hospital.^[11] However, there are no differences in morbidity in case of bile duct injury, the bile leakage in open surgery, and LC.

Before introduction of ultrasonography, symptomatic cholecystitis was detected by cholecystography. Most of the silent stones were found at autopsy and few by surgeons while doing an abdominal surgical procedure for some other illness. Many surgeons feel that there is no good reason for treating patients with silent stones, with the ever-increasing frequency of application of abdominal ultrasonography almost all of silent GB-stones can be discovered *in vivo*, but ultra sonography does not establish the patency of cystic duct, the salient histopathological feature of AC.

SUMMARY AND CONCLUSION

The present study of cholecystitis in Telangana will be useful for surgeon for proper approach. Clinician at various levels needs to have good understanding of varied clinical presentations of AC, silent (chronic) cholecystitis, and different management options, their pros and cons to be able treat the conditions effectively. Moreover, this present study demands further histopathological, nutritional, environmental, genetic, embryological studies because exact mechanism and duration of formation of GB stones are still unclear.

Table 1: Clinical manifestations of the patients with cholecystitis

Particular	Number of patients (%)
	Total = 86
Clinical presentations	
Right hypochondrial tenderness	86 (100)
Fever	28 (32.5)
Jaundice	06 (6.97)
Vomiting	23 (26.7)
leukocytosis	29 (33.7)
Mode of presentation	
Emergency	14 (16.2)
Elective	72 (83.7)
Types of pathology	
acalculous cholecystitis	75 (87.2)
Idiopathic calculus	11 (12.7)

Table 2: Organism cultured post-surgically in the patients with cholecystitis organism

Particular	Number of patients (%)
	Total = 86
D-Coli	29 (33.7)
<i>Staphylococcus aureus</i>	14 (16.2)
<i>Salmonella</i>	6 (6.97)
No organism	13 (15.1)
Culture not done due to early healing	24 (27.9)

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