

ORIGINAL ARTICLE

Assessment of complications in patients of Laparoscopic cholecystectomy

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ABSTRACT:

Background: Acute cholecystitis is a pathology of inflammatory origin. The present study was conducted to assess complications in patients with laparoscopic cholecystectomy. **Materials & Methods:** The present study was conducted on 46 patients who underwent laparoscopic cholecystectomy of both genders. A through clinical examination was done. Patients underwent laparoscopic cholecystectomy following standardized procedure. Complications were recorded. **Results:** Out of 46 patients, males were 26 and females were 20. The mean operating time in males was 75.2 hours and in females was 74.2 hours, blood loss was 51.4 cc in males and 49.6 cc in females, hospital stay was 4.6 days in males and 4.2 days in females. The difference was non-significant ($P > 0.05$). The common complications in patients was bile leakage in 2, wound infection in 6, CBD injury in 3 and post operative bleeding in 4. The difference was significant ($P < 0.05$). **Conclusion:** Authors found common complications such as CBD injury, post operative bleeding, bile leakage etc.

Key words: Bile leakage, Cholecystitis, Post operative bleeding

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INTRODUCTION

Acute cholecystitis is a pathology of inflammatory origin, usually associated with cholelithiasis, with a high incidence in our environment. The treatment of acute cholecystitis involves an important socioeconomic impact. There are two surgical therapeutic options: early cholecystectomy (EC) during the same admission or delayed cholecystectomy (DC) during a later admission after conservative treatment.¹

Cholecystectomy is one of the most common surgical procedure performed in the United States with over 600,000 procedures performed each year. In 1985, the first endoscopic cholecystectomy was performed by Eric Muhe of Boblingen, Germany. Since then laparoscopic cholecystectomy has been adopted around the world, and subsequently been recognized as the gold standard treatment for the gall stone disease.²

In young and otherwise healthy patients, early laparoscopic cholecystectomy (LC) is considered as the standard treatment of AC. However, whether early LC is desirable in elderly patients with AC remains controversial. LC for elderly patients with AC represents a complex challenge due to the increased potential risk of perioperative morbidity and mortality. Elderly patients may have many comorbid conditions, which are associated with increased postoperative LC complications.³ Many studies have demonstrated the advantages of LC for elderly patients, comparing perioperative outcomes of early cholecystectomy in elderly and younger patients.

However, several of them showed no difference in postoperative morbidity or mortality.⁴ The present study was conducted to assess cases of laparoscopic cholecystectomy in adults.

MATERIALS & METHODS

The present study was conducted in the department of General surgery. It comprised of 46 patients who underwent laparoscopic cholecystectomy of both genders. All patients were informed regarding the study and written consent was obtained. Ethical clearance was taken from institute ethical committee.

Data such as name, age, gender etc. was recorded. A through clinical examination was done. Patients underwent laparoscopic cholecystectomy following standardized procedure. Complications were recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 46		
Gender	Males	Females
Number	26	20

Table I, graph I shows that out of 46 patients, males were 26 and females were 20.

Graph I Distribution of patients

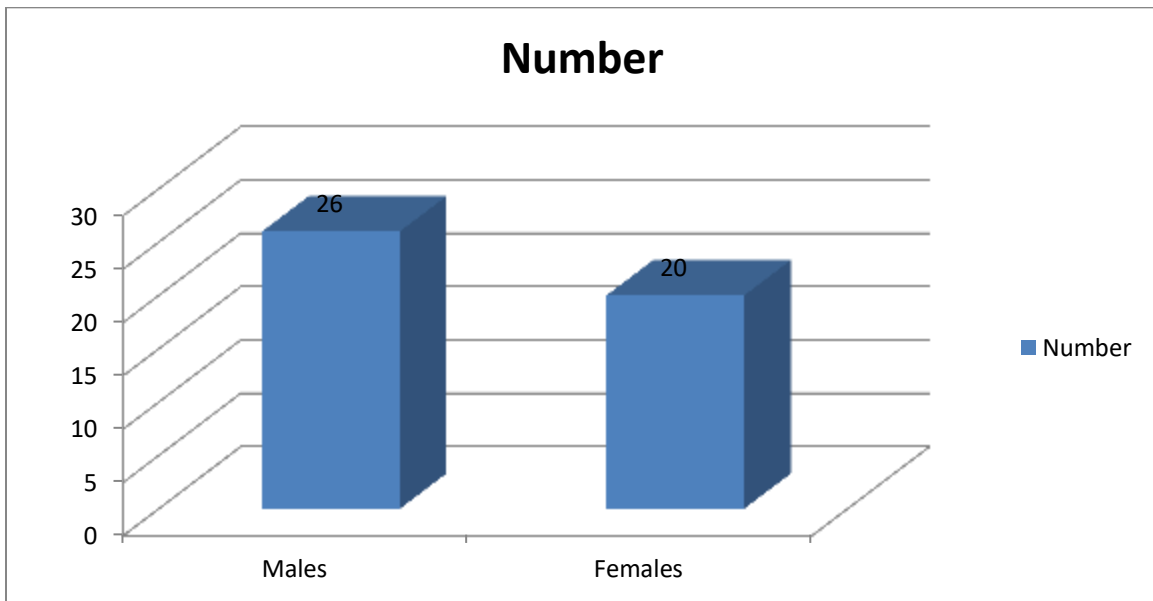


Table II Surgical outcome in patients

Outcome	Males	Females	P value
Operating time (minutes)	75.2	74.2	0.9
Blood loss (cc)	51.4	49.6	0.1
Hospital stay (Days)	4.6	4.2	0.6

Table II, graph II shows that mean operating time in males was 75.2 hours and in females was 74.2 hours, blood loss was 51.4 cc in males and 49.6 cc in females, hospital stay was 4.6 days in males and 4.2 days in females. The difference was non-significant ($P > 0.05$).

Graph II Surgical outcome in patients

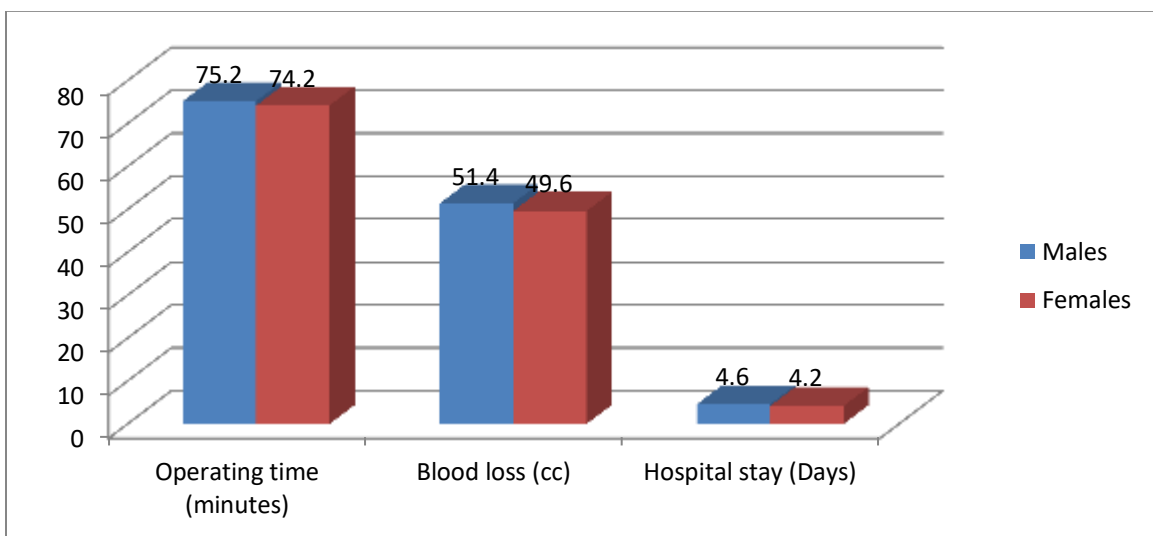
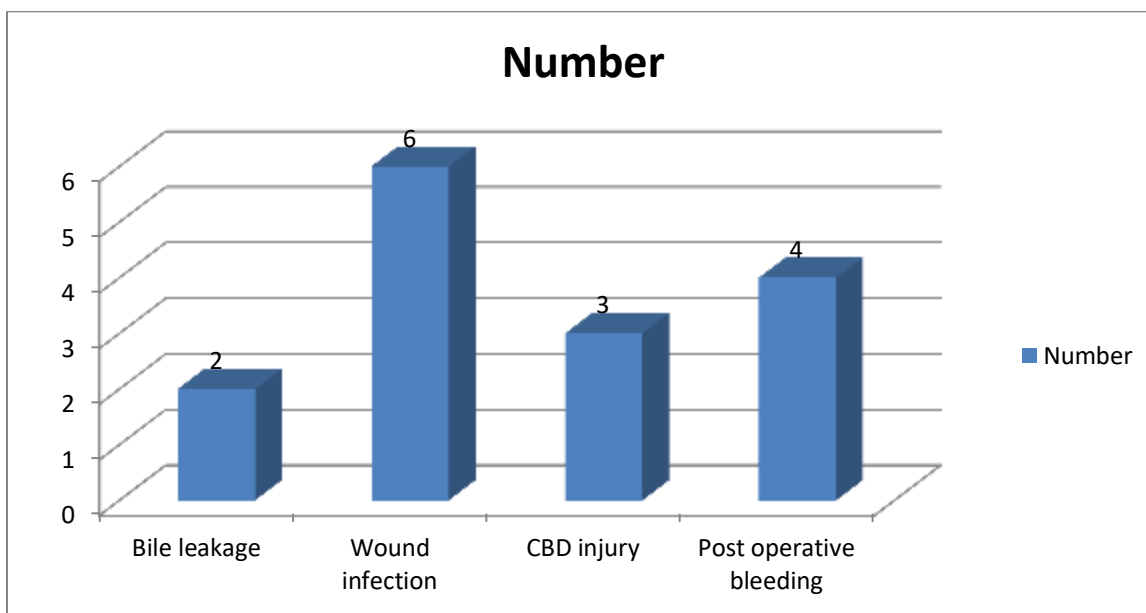


Table III Assessment of complications

Complications	Number	P value
Bile leakage	2	0.01
Wound infection	6	
CBD injury	3	
Post operative bleeding	4	

Table III, graph III shows that common complications in patients was bile leakage in 2, wound infection in 6, CBD injury in 3 and post operative bleeding in 4. The difference was significant ($P < 0.05$).

Graph III Assessment of complications



DISCUSSION

Laparoscopic cholecystectomy has established itself firmly as the “gold standard” for the treatment of gallstone disease. Studies have paying attention to most solely on the biliary complications of this procedure.^{5,6} Other complications such as significant hemorrhage during laparoscopic cholecystectomy are common too. Laproscopic cholecystectomy is the treatment of choice for cholelithiasis. Sometimes even after removal of gall bladder few complications arises. The complications associated with gallstone disease (GSD) such as cholecystitis, pancreatitis, and cholangitis have become significant public health issues imposing a great economic burden worldwide.⁷ The present study was conducted to assess cases of laparoscopic cholecystectomy in adults. In this study, there were 60 patients which comprised of 26 males and 20 females. We found that mean operating time in males was 75.2 hours and in females was 74.2 hours, blood loss was 51.4 cc in males and 49.6 cc in females, hospital stay was 4.6 days in males and 4.2 days in females. Yi et al⁸ retrospectively analyzed 205

patients who were diagnosed with acute cholecystitis. The patients were assigned to three groups: group A (aged <65 years), group B, (aged between 65 and 79 years), and group C (aged >79 years). Laparoscopic cholecystectomy was performed after preoperative evaluation, such as echocardiography, pulmonary function test, and consultation about past history. Significant differences were not found in the complication rate among the age groups. Open conversion was required in eight of the 114 patients in group A, seven of the 70 patients in group B, and one of the 21 patients in group C. However, no statistical significance was found. Moreover, no difference was noted in the start of the meal and the period from surgery to last visit, but hospital stay after surgery was longer in groups B and C. We found that common complications in patients was bile leakage in 2, wound infection in 6, CBD injury in 3 and post operative bleeding in 4. Gordan et al⁹ conducted a study on sixty patients. 30 patients received an intravenous 20 mg/kg bolus dose of tranexamic acid at induction of anesthesia (Group A), and another 30

did not receive the aforementioned drug at induction (Group B). The mean postoperative hospital stay (2.4 vs. 2.63, $P = 0.4147$), drain fluid hemoglobin (Hb) (0.83 vs. 0.90, $P = 0.2087$), drain fluid hematocrit (0.2434 vs. 0.2627, $P = 0.3787$), mean drain output (85 vs. 87.23, $P = 0.9271$), mean pulse rate at the start of surgery (74.2 vs. 75, $P > 0.999$), mean pulse rate 24 h after surgery (75.9 vs. 76.4, $P = 0.5775$), and mean change in Hb (0.240 vs. 0.266, $P = 0.2502$) in both the groups were not significant.

Zappulla et al¹⁰ found that 120 patients were divided into two groups with 60 in each group, group I with age 20-50 years and group II with age of 50-80 years. Laparoscopic cholecystectomy can be performed in any age group. It can also be performed safely in the elderly patients, although the operative time is slightly longer in view of relatively higher incidence of adhesions in and around the Calots triangle. Operative difficulty, rate of conversion, hospital stay and postoperative short term outcome are not influenced by the age of the patient.

CONCLUSION

Authors found common complications such as CBD injury, post operative bleeding, bile leakage etc.

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