

## ORIGINAL ARTICLE

### Assessment of Surgical Complications of Cholecystectomy- A retrospective analysis of 140 patients

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#### ABSTRACT

**Background:** Cholelithiasis is solidifications that can occur in any portion of biliary tract. It is most common disease affecting the bile tract. This study was conducted to estimate the post operative complication of cholecystectomy in study population. **Materials & Methods:** This study was conducted in the department of general surgery. 140 patients treated for gall bladder diseases and cholelithiasis was investigated. Patient's data such as name, age, gender etc. was retrieved from case history performa. Any complication found post operatively was recorded. **Results:** Out of 124 subjects, males were 60 and females were 80. The difference among patients was non significant. Age group 20-40 years consisted of 20 males and 30 females. Age group 40-60 years had 25 males and 30 females. 15 males and 20 females were more than 80 years of age. The difference was significant (P-0.01). The most common complication was adhesions (53) followed by bleeding (32), empyema (20), mucocele (15), anomaly of cystic duct (10) CBD (5), bowel injury (4) and difficult calot's triangle (1). The difference was significant (P-0.01). Wound infections was seen in 35 patients. Other was jaundice (30), biliary fistula (12), nausea/vomiting (25), biliary strictures (16) and incisional hernia (6). The difference was significant (P-0.02). **Conclusion:** Gall bladder diseases are commonly seen among old age group. It is the disease of elderly women. Gall stones are common findings. Common intraoperative findings are adhesions, bleeding, empyema, mucocele, anomaly of cystic duct.

**Key words:** Adhesions Cholecystectomy, Gall bladder.

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#### INTRODUCTION

Cholelithiasis is solidifications that can occur in any portion of biliary tract. It is most common disease affecting the bile tract. The incidence ranges from 10% to 20% of the world population. Important geographical and racial variations have been observed by several workers in the incidence of cholelithiasis in various parts of the world. Important geographical and racial variations have been observed by several workers in the incidence of cholelithiasis in various parts of the world.<sup>1</sup>

The incidence is more in women as compared to men with high prevalence among younger age group. Most of the cases remain asymptomatic and hence undiagnosed. So the exact prevalence becomes difficult. The traditional risk factors for gallstone disease (GSD) are the four 'F's- 'female, fat, forty and fertile' -but age is additional risk factors in western countries.<sup>2</sup>

A precise knowledge of the prevalence of stone disease in the general population should be very important for obtaining a precise figure of the incidence of the disease, which unfortunately is based on only very rough estimates, a better understanding of the relationship between environmental and dietary factors and the stone disease and the exact estimation of social and medical costs of the disease.<sup>3</sup>

Extracorporeal shock wave lithotripsy (ESWL) is the most common, easiest and non-invasive procedure. Percutaneous nephrolithotomy (PCNL) is an alternative procedure of ESWL which involves using a thin telescopic instrument called a nephroscope. Ureteroscopy (Endoscopic treatment) is minimally invasive procedures; no incision is given as the instruments go through the patient's existing "plumbing" and the patients can go home on the same day. Nowadays, laproscopic cholecystectomy is the treatment of choice for cholelithiasis. Sometimes even after removal of gall bladder little complication 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.<sup>4</sup> This study was conducted to estimate the post operative complication of cholecystectomy in study population.

#### MATERIALS & METHODS

This study was conducted in the department of general surgery. 140 patients treated for gall bladder diseases and cholelithiasis were investigated. Patient's data such as name, age, gender etc. was retrieved from case history performa. Any complication found post operatively was recorded. Results thus obtained were subjected to statistical analysis using chi-square test. P value < 0.05 was considered significant.

**RESULTS**

**Table I** Distribution of patients

Male	Female	P value
60	80	0.5

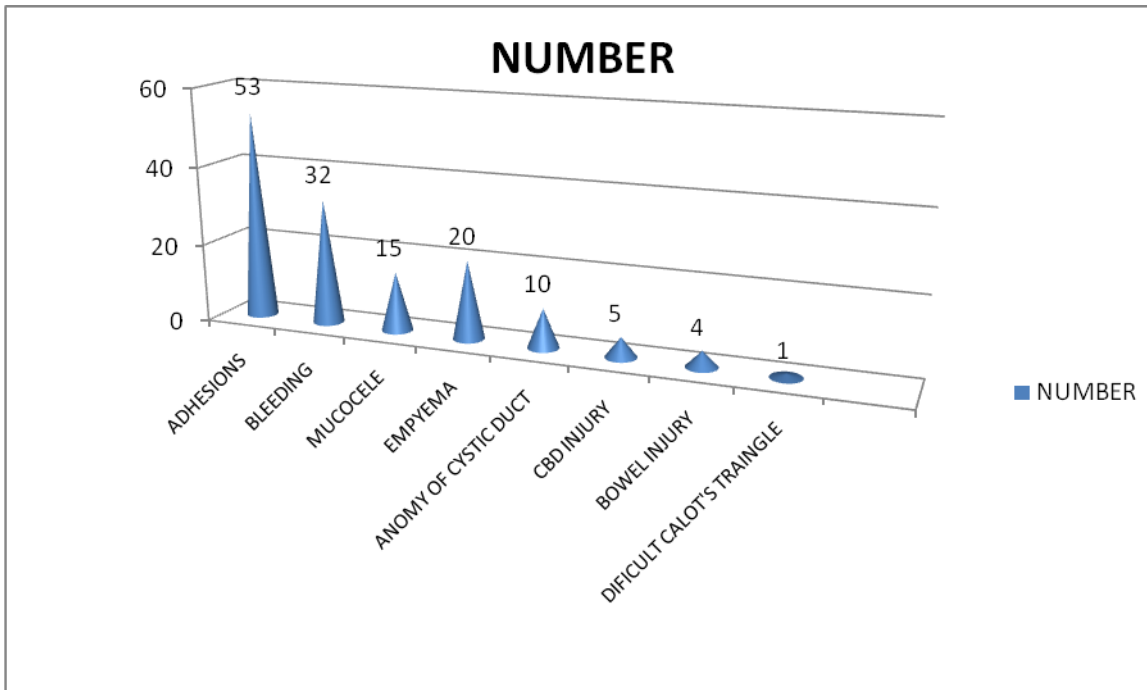
Out of 124 subjects, males were 60 and females were 80. The difference among patients was non significant (Table I).

**Table II** Distribution of patients according to age groups

Age groups	Male	Female	Total	Percentage	P value
20-40	20	30	50	35%	0.01
40-60	25	30	55	40%	
>60	15	20	35	25%	
<b>TOTAL</b>	60	80	140	100	

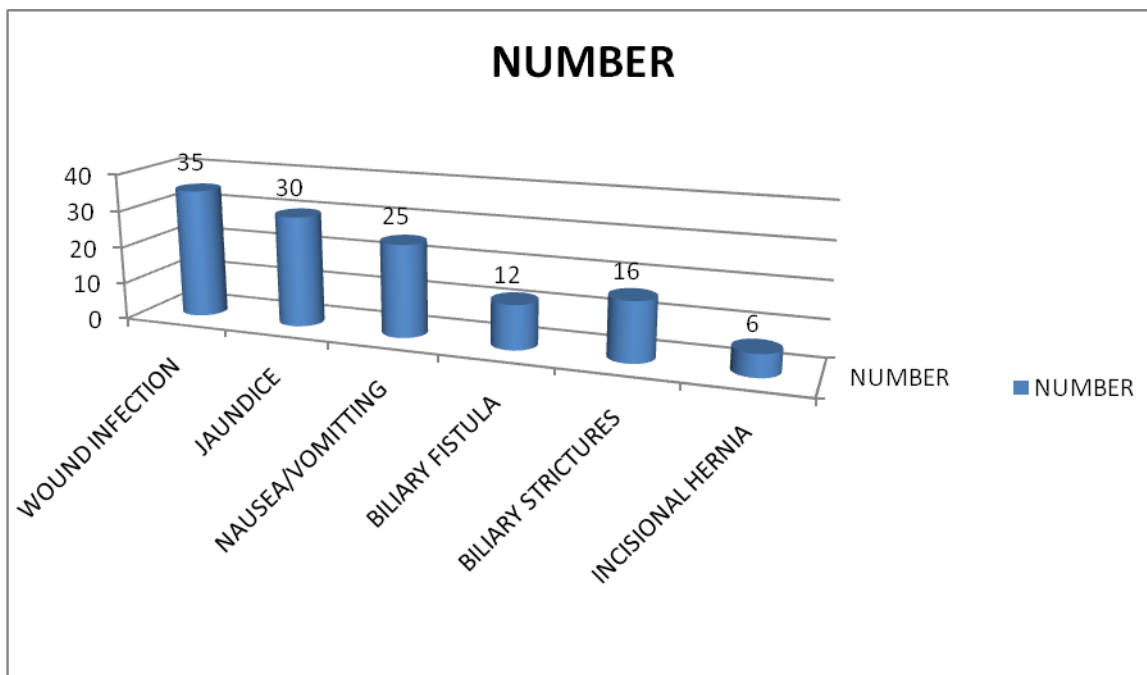
Table II shows that age group 20-40 years consisted of 20 males and 30 females. Age group 40-60 years had 25 males and 30 females. 15 males and 20 females were more than 80 years of age. The difference was significant (P-0.01).

**Graph I** Intraoperative findings in patients



Graph I shows that most common complication was adhesions (53) followed by bleeding (32), empyema (20), mucocele (15), anomaly of cystic duct (10) CBD (5), bowel injury (4) and difficult calot's triangle (1). The difference was significant (P-0.01).

**Graph II** Post operative complications



Graph II shows that wound infections was seen in 35 patients. Other was jaundice (30), biliary fistula (12), nausea/vomiting (25), biliary strictures (16) and incisional hernia (6). The difference was significant (P=0.02).

**DISCUSSION**

Gallstones (GS) are seen in all age groups but the incidence increases with every decade of life and they were found to be most prevalent in 4th and 5th decade of life. Twenty to thirty percent of western people aged 65 and around 10% of non-western population same ages have been affected by gallstones. GD is one of the most common abdominal conditions for which patients are admitted to hospitals in developed countries. GD is a very common gastrointestinal disorder mainly in the Western world; although this disease has a low mortality rate, its economic and health impact is significant due to its high morbidity. GD is one of the most common abdominal conditions for which patients are admitted to hospitals in developed countries.<sup>5</sup>

In this study, we evaluated the post operative complications of patients underwent cholecystectomy. This study consisted of 140 subjects, males (60) and females (80) who found one or more complications following cholelithiasis. The prevalence was more for females as compared to males. This is in agreement with Bhasinet al.<sup>6</sup>

We found that 20-40 years consisted of 20 males and 30 females. Age group 40-60 years had 25 males and 30 females. 15 males and 20 females were more than 80 years of age. David et al<sup>7</sup> in his study found that as age advances there is increase in cholesterol secretion in the body leading to increase GD. Common intraoperative findings was

adhesions, bleeding, empyema, mucocele, anomaly of cystic duct, (CBD), bowel injury and difficult calot’s triangle. Our results are in agreement to the study done by Gnnamet al.<sup>8</sup>

In present study most common post operative complication was wound infection. Other common post operative complications were jaundice, biliary fistula, nausea/vomiting, biliary strictures and incisional hernia. However Juoo<sup>9</sup> found nausea/ vomiting as major complication while Juoo<sup>9</sup> found jaundice as main complication in study group.

Renal stone is a multi-factorial disorder resulting from the combined influence of diet, epidemiological, environmental and genetic/ hereditary risk factors. Patients’ diet including like high salt intake and excessive coffee/tea intake may increase the risk for stones formation. Some medical conditions such as hypertension, thyroid disorder, and gout may put the patient at risk to develop renal stones.<sup>10</sup>

**CONCLUSION**

Gall bladder diseases are commonly seen among old age group. It is the disease of elderly women. Gall stones are common findings. Common intraoperative findings are adhesions, bleeding, empyema, mucocele, anomaly of cystic duct.

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