

## ORIGINAL ARTICLE

# COMPLICATIONS OF CHOLECYSTECTOMY AMONG PATIENTS OPERATED IN GENERAL SURGERY: A CLINICAL STUDY

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### ABSTRACT:

**Background:** Gall stones are common and it ranges from 10% to 20% of the world population. This study was conducted to estimate the post operative complication of cholecystectomy in study population. **Materials & Methods:** This study was performed in year 2013-14. All patients treated for gall bladder diseases and cholelithiasis was investigated in the department of general surgery. Patient's data was retrieved from the department. Any complication found post operatively was recorded. **Results:** In this study, we reported 200 subjects, males (80) and females (120) who found one or more complications following cholelithiasis. The difference among patients was non significant. 20-40 years age group consisted of 24 males and 56 females. Age group 40-60 comprised of 34 males and 48 females. 22 males and 16 females were more than 80 years of age. The difference was significant (P-0.01). The most common complication was adhesions (60) followed by bleeding (42), empyema and CBD (25 each), mucocele, anomaly of cystic duct and bowel injury (12 each) and difficult calot's triangle (4). The difference was significant (P-0.02). Wound infections were seen in 85 patients. This was most common post operative complication followed by jaundice (34), biliary fistula (26), nausea/vomiting (25), biliary strictures (18) and incisional hernia (12). The difference was significant (P-0.05). **Conclusion:** Gall bladder diseases are commonly seen among old age group. It is the disease of elderly women. Gall stones are common findings. Cholecystectomy is the treatment of choice. However, it has many complications that the patient can encounter post operatively.

**Key Words:** Gall stones, incisional hernia, mucocele,

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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. Differences exist between countries even in the continent of Europe: Kozoll, Dwyer, and Meyer (1959)<sup>1</sup> found much higher rates in Germany (32-6 %) and Sweden (19.6%). 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. 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.<sup>2</sup> Nowadays, 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.<sup>3</sup>

This study was conducted to estimate the post operative complication of cholecystectomy in study population.

## MATERIALS & METHODS

This study was performed in year 2013-14. All patients treated for gall bladder diseases and cholelithiasis was investigated in the department of general surgery. Patient's data was retrieved from the department. Any complication found post operatively was recorded.

The collected data was entered in computer and managed statistically using SPSS computer program version 21. Chi-square was used. P value < 0.05 was considered significant.

**RESULTS**

In this study, we reported 200 subjects, males (80) and females (120) who found one or more complications following cholelithiasis. The difference among patients was non significant (Table I).

**TABLE I:** Distribution of patients

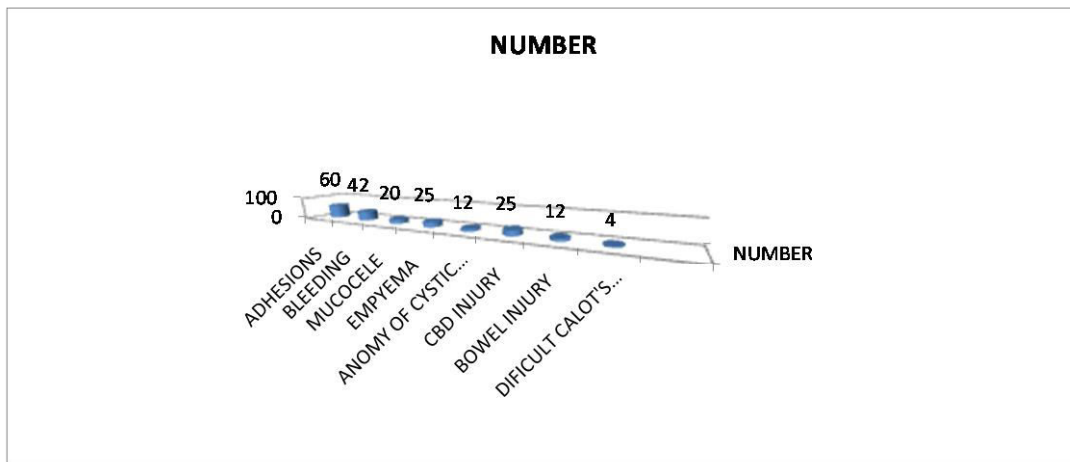
Male	Female	P Value
80	120	0.2

In this study, 20-40 years age group consisted of 24 males and 56 females. Age group 40-60 comprised of 34 males and 48 females. 22 males and 16 females were more than 80 years of age. The difference was significant (P-0.01). Graph I shows that most common complication was adhesions (60) followed by bleeding (42), empyema and CBD (25 each), mucocele, anomaly of cystic duct and bowel injury (12 each) and difficult calot’s triangle (4). The difference was significant (P-0.02). Wound infections were seen in 85 patients. This was most common post operative complication followed by jaundice (34), biliary fistula (26), nausea/vomiting (25), biliary strictures (18) and incisional hernia (12). The difference was significant (P-0.05) (graph II).

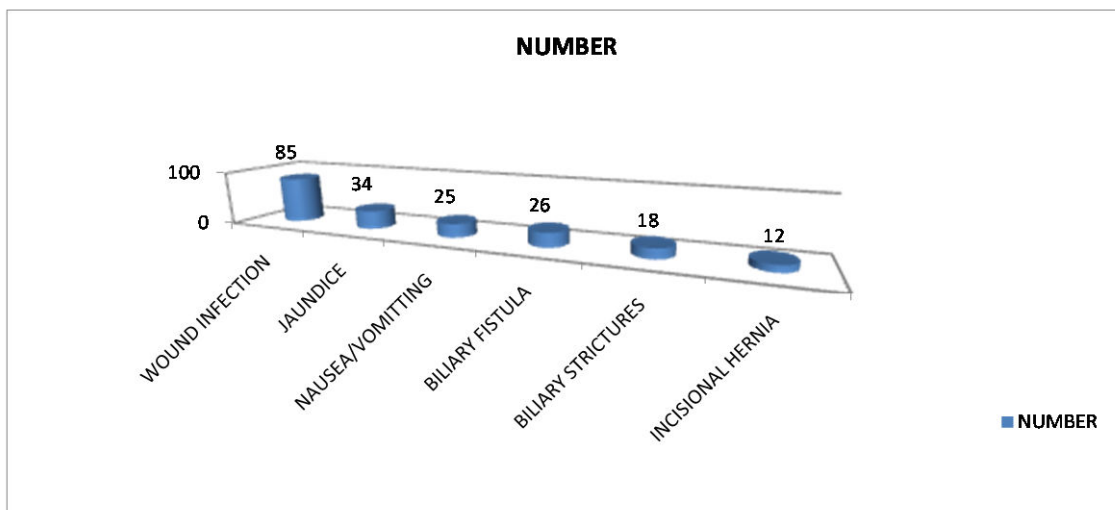
**TABLE II:** Distribution of patients in different age groups

Age Groups	Male	Female	Total	Percentage	P Value
20-40	24	56	80	40%	0.01
40-60	34	48	82	41%	
>60	22	16	38	19%	
<b>Total</b>	80	120	200	100	

**GRAPH I:** Intraoperative findings in patients



**GRAPH II:** Post operative complications



## DISCUSSION

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>4</sup>

In this study, we evaluated the post operative complications of patients underwent cholecystectomy. This study consisted of 200 subjects, males (80) and females (120) who found one or more complications following cholelithiasis. The prevalence was more for females as compared to males. Bhasin<sup>5</sup> his study found 82% female predominance and Khan<sup>6</sup> found 83.8% of prevalence rate. In this study, 20-40 years age group consisted of 24 males and 56 females. Age group 40-60 comprised of 34 males and 48 females. 22 males and 16 females were more than 80 years of age. Gnam 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 were adhesions (60) followed by bleeding (42), empyema and CBD (25 each), mucocele, anomaly of cystic duct and bowel injury (12 each) and difficult calot's triangle (4). Our results are in agreement to the study done by David et al.<sup>8</sup>

In present study most common post operative complication was wound infection. Wound infections was seen in 85 patients. This was most common post operative complication followed by jaundice (34), biliary fistula (26), nausea/vomiting (25), biliary strictures (18) and incisional hernia (12). However Duca<sup>9</sup> found nausea/ vomiting as major complication while Juo<sup>10</sup> found jaundice as main complication in study group.

## CONCLUSION

Gall bladder diseases are commonly seen among old age group. It is the disease of elderly women. Gall stones are common findings. Cholecystectomy is the treatment of choice. However, it has many complications that the patient can encounter post operatively.

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