

EARLY CHOLECYSTECTOMY AND ITS COMPLICATIONS

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ABSTRACT

Objective: To determine the complications of early cholecystectomy in cases with acute biliary pancreatitis. **Material and methods:** This was a descriptive case series study that was carried out during January to July 2018 at the Department of surgeries National Hospital and Medical centre and Fatima memorial Hospital Lahore. The cases were selected of either gender with age more than 20 years via non probability-consecutive sampling. The diagnosis of this was made clinically. Then laparoscopic cholecystectomy was done in these cases and these cases were followed in terms of duration of surgery, duration of hospital stay and recurrence of pancreatitis. **Results:** In the present study, there were total 40 cases of acute biliary pancreatitis, with mean age of 49.43 ± 9.24 years. There were 23 (57.50%) were females and 17 (42.5%) males. mean duration of surgery was 51.98 ± 9.14 . The mean duration of surgery was 53.21 ± 10.39 minutes. Overall complications were observed in 6 (15%) of the cases. Prolonged duration of hospital stay was the seen in 3 (7.5%) of the cases, prolonged duration of surgery in 2 (5%) of cases and recurrent pancreatitis in only 1 (2.5%) case. **Conclusion:** Complications of early cholecystectomy in cases with acute biliary pancreatitis result are not uncommon and prolonged duration of hospital stay is the most common.

KEYWORDS: Pancreatitis, Early cholecystectomy, Prolonged.

INTRODUCTION

Pancreatitis is one of the fatal medical entity and can be divided into acute or chronic form where the former has the highest degree of morbidity. It can be defined as the inflammation of the pancreas due to any cause. Previous studies have revealed the mortality rate of 3 to 8% across the globe despite aggressive management.^[1]

There major underlying etiologies include drugs, gallstones, alcoholism, toxins traumatic and wide range of bacterial, viral or uncommonly fungal infections. Gall stones are the salient ones among all these and according to a survey they are found in more than 75% of the cases suffering from pancreatitis. The pathophysiology underlying this is obstruction of drainage of bile and retrograde activation of the pancreatic enzymes and leading to destruction of the own cells is thought to be the major underlying pathophysiology.^[2-3]

The diagnosis is usually made clinical and there are different classifications score to diagnose as well as categorize its severity and outcome. APACHE II, Modified Glasgow and Ranson's prognostic criteria are most widely used.^[4] CT scan is considered as the gold standard for this.

Surgical resection of the gall bladders is the mainstay of the treatment sooner or later and both early and delayed surgeries are carried out and each carrying their own benefits and side effect profiles.^[3-4]

MATERIAL AND METHODS

Objective

To determine the complications of early cholecystectomy in cases with acute biliary pancreatitis.

Methodology

This was a descriptive case series study that was carried out during January to July 2018 at the Department of surgeries National Hospital and Medical centre and Fatima memorial Hospital Lahore. The cases were selected of either gender with age more than 20 years via non probability-consecutive sampling. The diagnosis of this was made by the presence of epigastric and right hypochondrial pain of 5 or more on VAS in cases with other symptoms of vomiting, nausea and with or without fever. The cases with HCC and multi organ failure were excluded from this study. Then laparoscopic cholecystectomy was done in these cases and these cases were followed in terms of duration of surgery (prolonged if more than 60 mins), duration of hospital stay (prolonged if more than 5 days) and recurrence of

pancreatitis (yes/no). For recurrence they were assessed monthly and final outcome was seen at 3 months.

Statistical analysis

The data was analyzed by SPSS version 23.0. Frequency and percentages were used to present nominal data and mean and standard deviation for numerical data.

RESULTS

In the present study, there were total 40 cases of acute biliary pancreatitis, with mean age of 49.43 ± 9.24 years. There were 23 (57.50%) were females and 17 (42.5%) males. mean duration of surgery was 51.98 ± 9.14 . The mean duration of surgery was 53.21 ± 10.39 minutes as shown in table I. Overall complications were observed in 6 (15%) of the cases as displayed in figure I. Prolonged duration of hospital stay was the seen in 3 (7.5%) of the cases, prolonged duration of surgery in 2 (5%) of cases and recurrent pancreatitis in only 1 (2.5%) case (table II).

Table No. I: Study variables.

	Study variables	
	Range	Mean \pm SD
Age	21-70 years	49.43 ± 9.24
Weight	41-102 kg	72.11 ± 14.67
Duration of surgery	45-98 mints	51.98 ± 9.14

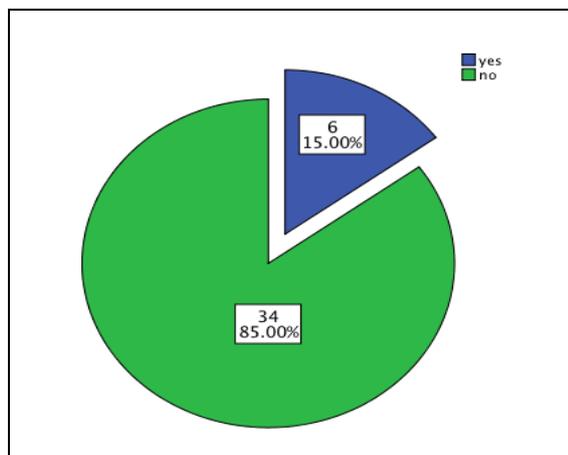


Figure No. I: Complications.

Table No. II: Types of Complications (n=40).

	Types of complications	
	Number	Percentages
Prolonged duration of hospital stay	3	7.5%
Prolonged duration of surgery	2	5%
Recurrence of pancreatitis	1	2.5%
None	34	85%

DISCUSSION

Gall stones are increasing day by day due to change in the life style and increase in fatty diet and alcoholism trends and on the other hand there is decrease in the

physical activities. These can be highly problematic if they obstruct the biliary pathway and lead to retrograde pancreatitis and cholecystectomy is considered as the treatment of choice either immediately or delayed each carrying its own risk and benefit ratios.

In the present study, in cases suffering from acute biliary pancreatitis, the complications of early cholecystectomy were noted in 6 (15%) of the cases. Some of the patients had more than one type of complications observed. Prolonged duration of hospital stay was the seen in 3 (7.5%) of the cases. The studies done in the past have also shown almost the similar results and they have also revealed that the prolonged duration of surgery was the most common complication observed.^[5-6] This was explained by the considering the nature of the disease where this was seen that acute pancreatitis is a highly symptomatic disease and that's why led longer duration to settlement in the symptomatology. According to a study carried out by Aboulian A et al, they compared early and delayed surgeries for removal of gall bladder and they found that in delayed surgeries rather prolonged duration was seen as compared to early surgery.^[7]

Prolonged duration of surgery was the 2nd commonest complication of the present study which was observed in 2 (5%) of cases and was in line with the studies of the past which have shown this prevalence in less than 5% of the cases.^[8-10] This can be explained by the fact that in early surgery, acute and extensive inflammation lead more time to clear the debrided tissue and led more time to surgery. In a study done by Jee SL et al^[8] they, compared the time of early and delayed surgery and it was seen that the average time for early surgery was 85 vs 80 minutes with late cholecystectomy with p value of 0.75.

Recurrence of pancreatitis was seen in only 1 (2.5%) cases. The recurrence in the previous studies was seen between 02 to 11% of the cases.^[11-13]

CONCLUSION

Complications of early cholecystectomy in cases with acute biliary pancreatitis result are not uncommon and prolonged duration of hospital stay is the most common.

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