

Study on Laparoscopic Cholecystectomy for Acute Cholecystitis in Bhagalpur

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Abstract

Acute cholecystitis with or without stone is a common cause of acute abdominal pain. Laparoscopic cholecystectomy has been accepted as the gold standard procedure for management of symptomatic gallstone and chronic cholecystitis. The aim of study is to find out whether lap cholecystectomy can be performed for acute cholecystitis. A total of 60 laparoscopic cholecystectomy performed for acute cholecystitis were evaluated for duration of surgery, conversion rate, cbd and other organ injury and postoperative stay. 25 patients underwent lap. Cholecystectomy within 48 hours of onset of symptoms (Group 1), 35 patients underwent surgery after 48 hours of onset of symptoms. Laparoscopic cholecystectomy can safely be performed at any time after onset of acute cholecystitis.

Keywords: Laparoscopic cholecystectomy, Acute cholecystitis, conversion rate

Introduction

Although Laparoscopic cholecystectomy has been accepted as procedure of choice for treatment of symptomatic gallstones and chronic cholecystitis [1,2], its role and its timing in management of acute cholecystitis is controversial. The chances of severe complications, if surgery is performed in an area of distorted anatomy

caused by acute inflammation is the major concern [3,4]. Performing this procedure during the phase of acute inflammation is associated, even in expert hands, with a high incidence of conversion to open surgery [5-8], resulting in loss of the advantage of this minimally invasive procedure. Recently laparoscopic cholecystectomy is considered to be the standard of treatment if the patient is seen within 48 hours of attack of cholecystitis because adhesions would have not developed so early after the onset of inflammation [2]. When patients are seen after 48 hours from the onset of acute cholecystitis, surgeons however prefer to delay cholecystectomy and prefer conservative treatment followed by an interval cholecystectomy [3]. The rationale for such an approach is that inflammatory adhesions occur after 48 hours and make dissection difficult and dangerous but the drawback of this approach is that several patients get recurrence of symptoms such as biliary colic or another attack of cholecystitis during this waiting period.

Aim

The aim of this study is to examine whether laparoscopic cholecystectomy can be safely performed in acute cholecystitis irrespective of time since onset, thereby avoiding the occurrence of recurrent symptoms and also to

evaluate duration of surgery, conversion rate, other organ injury and postoperative stay.

Methods

60 patients of acute cholecystitis who underwent laparoscopic cholecystectomy at J.L.N.M.C.H Bhagalpur from May 2011 to April 2015 were examined. All patients included had features of acute cholecystitis clinically and on ultrasonography at the time of admission. Out of 60 patients, 25 patients underwent lap cholecystectomy within 48 hours of symptoms (Group 1) and 35 patients underwent lap. Cholecystectomy after 48 hours of symptoms (Group 2). They were compared on following parameters :

- a. Duration of surgery
- b. Conversion rates
- c. Duration of postoperative stay
- d. Injury to biliary and other organ

Laparoscopic cholecystectomy were performed with standard four port technique. In cases of acutely inflamed tense gallbladder contents were first aspirated. Adhesiolysis was done when encountered in some cases. Callot’s triangle dissected after posterior dissection. Clips were applied on cystic duct and artery and divided. Gallbladder dissected from liver bed using hook cautery. Inflamed gallbladder were retrieved using and endobag through the umbilical port. Drain placed through the 4th port.

Results

There were no significant difference in duration of surgery in Group 1 and Group 2 but slightly more time taken in Group 2 . Conversion rate in Group 1 was 10 % while in Group 2 it was 17 %(Table1).

Table 1: Parameters

	GROUP 1	GROUP 2
Number of cases	25	35
Duration of	55.34±3.64	59.67±4.44

surgery		
Conversion	3	5
Biliary and other organ injury	0	0
Post-operative stay	5	7

Al Qasabi et al have reported conversion rate of 28.7% [9]. There was more post-operative stay in Group 2. There was no major biliary or other organ injury in any Group.

Discussion

Duration of surgery and Post-operative stay were longer when laparoscopic cholecystectomy were performed after 48 hours. Conversion rate was more (17%) in Group 2 patients when cholecystectomy was performed after 48 hours of symptoms. The longer duration of surgery for group 2 could be attributed to the significantly higher percentage of pus filled gallbladder, gangrenous gallbladder encountered during surgery and time taken for endo-bag retrieval and drain placement. Lo et al compared early with interval cholecystectomy and reported conversion rate of 7.4% versus 20%. [10]

Conclusion

Laparoscopic cholecystectomy may be safely performed in patients of acute cholecystitis irrespective of time since onset of symptoms. Although there is some increase in duration of surgery and post operative stay in laparoscopic cholecystectomy for acute cholecystitis but it removes the chances of recurrence of biliary colic and another attack of cholecystitis during waiting period of interval cholecystectomy.

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