

# Early Open Cholecystectomy for Acute Cholecystitis

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## ABSTRACT

The aim of this study is to determine the safety of early open cholecystectomy in acute cholecystitis. This is a prospective study of 200 patients (age range from 30 to 60 years). This study was conducted on the surgical floor of Jinnah hospital from January 2000 to December 2006. Patients were diagnosed as acute cholecystitis by history, clinical examination, ultrasound scan and white cell count and confirmed by operative findings who underwent open cholecystectomy 3 to 5 days after admission. 60 cases had empyema of the gall bladder and 25 cases had perforation of the gall bladder with localized biliary peritonitis. 4 cases developed wound infection. There were no other complications. Early open cholecystectomy is a safe and beneficial method for treating acute cholecystitis

**Key words** acute cholecystitis, early cholecystectomy, open.

## INTRODUCTION

Cholecystectomy is a standard treatment for patients with cholelithiasis and its complications. However timing of surgery for acute cholecystitis has been a matter of some debate<sup>2,6</sup>. The literature supports early cholecystectomy as having the advantage of being safe cost effective and beneficial for the patient. It prevents complications of acute cholecystitis as well as preventing further attacks as compared to delayed cholecystectomy<sup>4,5</sup>.

There are many techniques of cholecystectomy. In cases of disturbed anatomy at the Calots triangle. Fundus first method, leaving a cuff of gall bladder behind have all been used. In the modern era laparoscopic removal of gall bladder is gaining preference<sup>1</sup> but some people still advocate open cholecystectomy for some patients.

Early cholecystectomy for acute cholecystitis is not a widely practiced option in our clinical settings, although the world literature supports the use of early cholecystectomy for acute cholecystitis<sup>9,12,14</sup>. This prospective study was conducted to determine the efficacy and safety of early cholecystectomy in acute cholecystitis in our environment. Although recent studies advocate laparoscopic cholecystectomy<sup>3</sup>, open cholecystectomy is still a viable and cost saving option<sup>10</sup>. In addition some patients will require conversion to open cholecystectomy<sup>11</sup>.

## PATIENTS AND METHODS

This study was conducted at the surgical floor of Jinnah hospital from January 2000 to December 2006. It included 165 female and 35 male patients. The age range was from 30 to 60 years. All patients

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were admitted through emergency and operated either 3 days or 5 days after admission they were kept nil by mouth and given I/v fluids. All patients were given antibiotics and were operated through right transverse sub costal incision. Standard cholecystectomy was done in 80 (70 female 10 male) patients. Fundus first method was employed in 120 patients (95 female 25 male patients). 20 females and 5 males had localized biliary peritonitis. 60 patients had empyema of the gall bladder (50 female 10 male). A cuff of gall bladder was left behind in 50 patients (45 female 5 male). A suction drain was placed in the sub hepatic space and wound closed in layers. Patients were given I/v antibiotics for 72 hours and shifted to oral antibiotics which were continued for 7 days. Oral feeding was started on the second postoperative day. Drain was removed after 48 hours in 150 patients (135 female 15 male) after 72 hours in 35 patients (30 female 15 male patients) and after 96 hours in 15 patients (10 female and 5 male)

## RESULTS

The age range and sex distribution of the patients is given in the following table

| Age range   | Male | Female |
|-------------|------|--------|
| 21-30 years | 3    | 7      |
| 31-40 years | 8    | 90     |
| 41-50 years | 17   | 55     |
| 51-60 years | 7    | 13     |

The symptoms, signs and their frequency is shown in the following table

| Symptoms                         | =n  |
|----------------------------------|-----|
| Pain right hypochondrium         | 200 |
| High grade fever                 | 190 |
| Tenderness rigidity and guarding | 200 |

The operation time

| Operation time | =n  |
|----------------|-----|
| 45-60 minutes  | 125 |
| 61-75 minutes  | 50  |
| 76- 90 minutes | 25  |

The modes of cholecystectomy

| Mode                    | =n  |
|-------------------------|-----|
| standard                | 80  |
| Fundus first            | 120 |
| Partial cholecystectomy | 50  |

The time of removal of drains

| Time of removal | =n  |
|-----------------|-----|
| 48 hours        | 150 |
| 72 hours        | 35  |
| 96 hours        | 15  |

Length of hospital stay

| Length of stay | =n  |
|----------------|-----|
| 72 hours       | 165 |
| 96 hours       | 25  |
| 120 hours      | 10  |

All the patients made good recovery .4 cases developed wound infection .2 settled on oral antibiotics the other two needed removal of 2 -3 sutures as well as oral antibiotics. There were no cases of sub hepatic collections.

**DISCUSSION**

Although literature supports early intervention for acute cholecystitis<sup>1,7,14</sup> in our surgical routine we defer surgery for acute cholecystitis. Late surgery leaves the door open for further attacks of the disease and a problem for the patient<sup>8,9</sup>.this study not only demonstrates the safety of early surgery but also indicates its usefulness. This observation is also borne out by various other studies<sup>4,5,13</sup>. Although recent studies advocate laparoscopic cholecystectomy<sup>3</sup>, open cholecystectomy is still a viable and cost saving option<sup>10</sup>.

**CONCLUSIONS**

We conclude that early open cholecystectomy is safe beneficial and effective treatment for acute cholecystitis<sup>1,14</sup>. It has few complications and it causes early cure it is still a viable option in spite of the availability of laparoscopy<sup>15</sup>. Needless to say it prevents further attacks and prevents serious complications of acute cholecystitis like perforation and biliary peritonitis<sup>13</sup>. The alternative old approach of delayed surgery is more hazardous for the patient<sup>4</sup>.

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