ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 11, Issue, 01, pp.828-830, January, 2019

DOI: https://doi.org/10.24941/ijcr.34209.01.2019

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

EVALUATION OF POSTOPERATIVE HOSPITAL STAY IN LAPAROSCOPIC CHOLECYSTITIS IN ACUTE CHOLECYSTITATIS

[1]Dr. Paramjeet Kaur, [2]Dr. Suman Chawla, [3]Dr. Bavneet Kaur and [4,*]Dr. Sarabjit Singh

[1]Assistant Professor, Chintpurni Medical College, Pathankote, India
[2]Post Graduate in Surgery ASCOMS Batra , Jammu, India
[3]Associate Professor, PIMS, Jalandhar, India
[4]Professor of Surgery, Chintpurni Medical College, Pathankote, India

ARTICLE INFO

Article History:
Received 20th October, 2018
Received in revised form
06th November, 2018
Accepted 09th December, 2018
Published online 31st January, 2019

Key Words:
Acute cholecystitis, Laprascopic Cholecystectomy (LC), Hospital Stay and Cholecystogastric Fistula.

ABSTRACT

Gallbladder removal is one of the most commonly performed surgical procedures. Gallbladder removal surgery is usually performed with minimally invasive techniques and the medical name for this procedure is Laparoscopic Cholecystectomy (LC). Gallstones occur worldwide, however it is commonest among North American Indians and Hispanics but low in Asian and African populations. Increased experience and improvements in the application have proved LC to be safe and feasible in patients with acute cholecystitis, and LC has been shown to be preferable to open cholecystectomy. LC not only reduces the operation time, but also duration of symptoms and length of hospital stay, as described in the Tokyo guidelines.

Citation: Dr. Paramjeet Kaur, Dr. Suman Chawla, Dr. Bavneet Kaur and Dr. Sarabjit Singh. **2019.** "Evaluation of postoperative hospital stay in Laparoscopic cholecystitis in acute Cholecystitatis", *International Journal of Current Research*, 11, (01), 828-830.

INTRODUCTION

Laparoscopic cholecystectomy (LC) has been the treatment of choice for symptomatic gallstone disease since 1990 (Mac Mohan *et al.,* 2000). The advantages of LC over open cholecystectomy (OC) have been immediately appreciated. These include an earlier return of bowel function, less postoperative pain, improved cosmesis, a shorter length of hospital stay, an earlier return to full activity, lower rate of postoperative complications and decreased overall cost (Wasana *et al.,* 2017). A minimal impact on immune system, minimal exposure to external environment, better visualization of tissues for dissection and hemostasis reduces the frequency of infections and other morbidity in patients undergoing LC (Siddiqui and Khan, 2006) Nevertheless, there are several patients who have had a postoperative hospital stay of more than 24 hours, due to conversion to open surgery or complications. Thus, the factors predicting this should be investigated to inform the at-risk patients. The aim of this study was to acess the time period of post operative stay in the hospital after LC in acute cholecystitis and to acess the positive benefits of LC in these patients. Predictive factors for delayed post operative stay has been studied by Tsang *et al.,* (2007) where in independent predictive factors for delayed postoperative stay have been elucidated which include i age over 60 years, time for diet resumption greater than 8 hours and oral analgesia intake of greater than two tablets.

Corresponding author: **Dr. Sarabjit Singh**
Professor of Surgery, Chintpurni Medical College, Pathankote, India.

MATERIALS AND METHOD

The present study was conducted on 65 patients having acute cholecystitis and were laproscopically operated with in 24hrs of admission. Prior to surgery patients were put on IV antibiotics and IV fluids and operated within 24 hrs of admission.

Exclusion criteria: The study excluded the patient's with proven common bile duct stones, surgical obstructive jaundice, history of cholangitis, acute pancreatitis, cholecysto enteric fistula, previous upper abdominal surgery, severe cardio pulmonary disease, malignancy, pregnancy, bleeding disorder, portal hypertension and patient's choice for open surgery. All the patient's were evaluated by consultants and standard laboratory and radiographic tests were obtained. The patient's were operated after undergoing all laboratory investigations and for fitness of anaesthesia. Medical biodata of all the patient's were recorded in the performa and their consent was taken for them to be included in the study.

RESULTS

The present study was conducted on 65 patients, where in 12 were males and 35 were females taking the male to female ratio to 1:4.40.Thereby, depicting the fact that gall bladder disease has higher incidence in females than males in all age (Fig 1). Post operative assessment was made with regard to the post operative pain, post operative nausea, vomiting, wound infection and removal of drain. Among the 65 cases it was observed that in 5 cases (8%) no drain was placed in the sub hepatic space, while in 51 cases (78%) cases drain was removed on 1st post operative day. In 8 cases (12%), drain was removed on 2nd post operative day due to bile leak from gall bladder intra operatively. In one case, drain was removed on 6th post operative day as the patient had cholecystogastric fistula (Fig. 2).

The last important criteria in post-operative assessment was duration of hospital stay. In our study a maximum number of 45 patients (69%) had hospital stay of 2 days while 15 (23%) patients had a hospital stay of 3 days. Only 5 patients had to stay for more than 3 days and one among them had a hospital stay of 8 days as he had cholecysto gastric fistula (Fig 3). Follow up at 1st and 2nd post operative week was done to assess pain and discomfort, condition of wound and infection, level of activity and return to work. In our study 50 patients (77%) had no complaints at the follow up on 1st week and had their sutures removed at the 1st follow up itself. 10 patients (15%) had pain at the port site at first follow up. 3 patients complained of bloating and 2 of abdominal pain (Fig 4). 53 (81.5%) patients returned to their previous daily routine and were able to do work in their full capacity on the 2nd follow up. 11(17%) patients were able to resume light work while only one patient was advised rest even after 2nd post operative week due to abdominal pain (Fig 5)

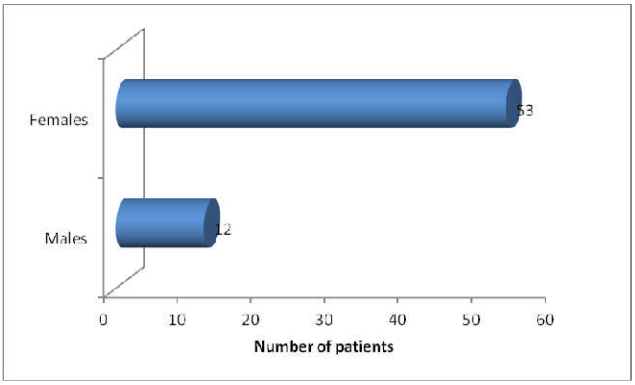

Fig. 1. Depicting the gender wise prevelance of gall stones

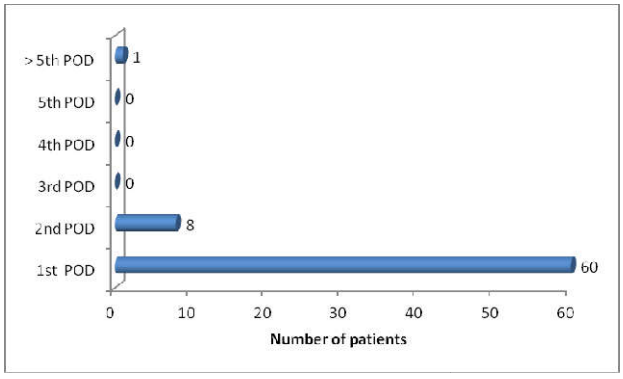

Fig. 2. Post operative drain removal

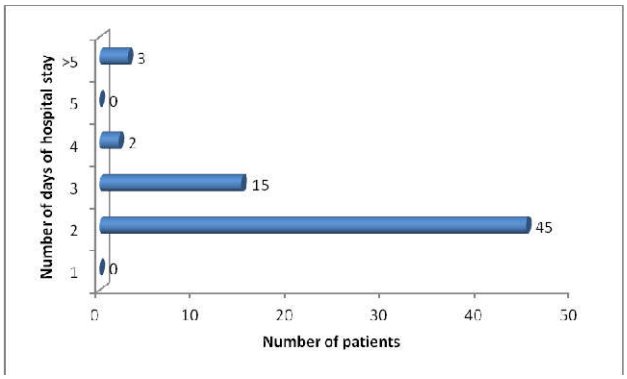

Fig 3. Depicting Number of days of hospital study.

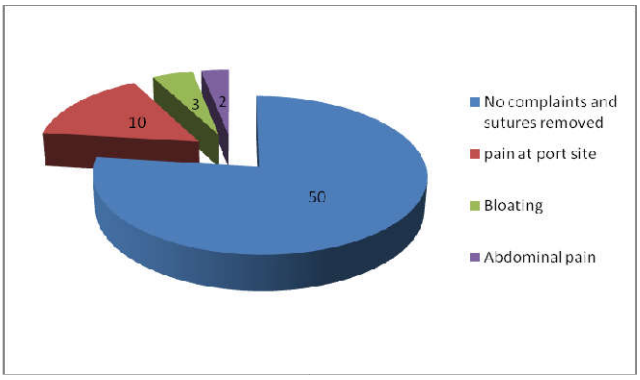

Fig 4. Depicting observations at 1st follow up

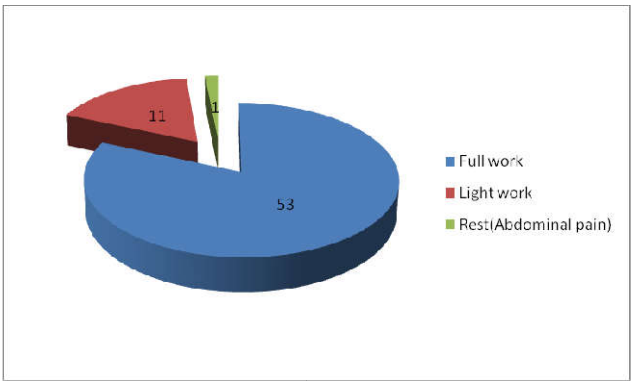

Fig 5. Depicting observations aat 2nd follow up

DISCUSSION

Gallbladder disease is one of the most common procedures done in the United States with more than 1.2 million cholecystectomies done annually. Before 1991, an open technique was the standard procedure for cholecystectomy. This usually included performing an intraoperative cholangiogram, and patients usually had a 2 to 6-day postoperative in-house stay. With the advent of laparoscopic surgery and the laparoscopic cholecystectomy in the early 1990s, the gold standard for cholecystectomy has changed to a laparoscopic approach. This method showed a 30% increase in the overall performance of elective cholecystectomies. Today, 92% of all cholecystectomies are done laparoscopically. There are several indications in performing open cholecystectomies, and this procedure remains an important part of training for the general surgery resident (Jones and Deepen, 2018). Several risk factors for gallstone formation have been identified. One of the most important risk factors is female gender. Rates of gallstones are two to three times higher among women than

men. But this is primarily a phenomenon of the childbearing age. Pregnancy is also a major risk factor for gallstone formation. The risk is related to the number of pregnancies. Sex hormones are most likely to be responsible for the increased risk. Estrogen increases biliary cholesterol secretion causing cholesterol supersaturation of bile. Thus, hormone replacement therapy in postmenopausal women and oral contraceptives have also been described to be associated with an increasing the frequency of gall stones (Novacek, 2006).

In our study also female preponderance was observed in gall bladder diseases. In our study drain in sub hepatic space was kept in 60 (92%) of 65 cases in 78% cases drain was removed on 1st operative day while !2% had their drains removed on 2nd post operative day. These findings of ours are in accordance with those of Smith *et al*., (1991). Post operative stay in the hospital ranged from 2 to 8 days where in 69 % patients were discharged on 1st post operative day and 23% on 2nd post operative day. Only 5 patients had to stay for more than 3 days. Out of these, one had to stay for 8 days and this was the case of a patient who had cholecystogastric fistula. This is in concordance to the results by Rattner *et al.,* (1993) reported post operative stay of 2-6 days for his patients and of these, 6 day post operative stay was reported in converted cases. Thus, the hospital stay of the patients in our study was in accordance to the earlier studies. In our study, 81.5% of the patients were free of any epigastric discomfort and returned to full work by 2 weeks. Zucker *et al*., (1991) in a study reported that 5-30 days was the time during which patients resumed their work.

Conclusion

The above study concluded with the fact that in the cases of acute cholecystitis laproscopic cholecystectomy relieved their agony at the earliest, they have a short hospital stay and a less financial burden. These patients early return to full work with cosmetic benefit.

Acknowledgements: To all the patients who willing fully participated in the study

Conflict of Interest: None declared

REFERENCES

Jones MW., Deppen JG. *et al*., 2018. Gallbladder, Cholecystectomy, Open. [Updated 2018 Oct 27]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing.

Karl A. Zucker 1991. Surgical Laparoscopy; second edition.

McMohan AJ., Fischbacher CM., Frame SH., Macleod MC., 2000. Impact of laparoscopic cholecystectomy: a population based study. *Lancet*, 356: 1632 - 1637.

Novacek G. *et al*., 2006. Gender and Gallstone Disease. Wiener Medizinische Wochenschrift; 156 (19-20): pp 527–533

Rattner DW., Ferguson C., Warshaw AL. *et al*., 1993. Factors associated with successful laproscopic cholecystectomy for acute cholecystitis. *Annals of Surgery.,* 217(3): 233-236

Siddiqui K., Khan AF. *et al*., 2006. Comparison of frequency of wound infection: open versus laparoscopic cholecystectomy. Ayub Med Coll Abbottabad. 18(3):21-24.

Smith JF., Boysen D., Tschirhart J., Williams T. *et al*., 1991. Risks and benefits of laparoscopic cholecystectomy in the community hospital setting. *J Laparoendosc Surg.,* Dec;1(6):325-32.

Tsang YY., Poon CM., Lee KW., Leong HT. *et al*., 2007. Predictive factors of long hospital stay after laparoscopic cholecystectomy. *Asian J Surg.,* 30:23–28

Wasana Ko-iam, Trichak Sandhu, Sahattaya Paiboonworachat, *et al*., 2017. "Predictive Factors for a Long Hospital Stay in Patients Undergoing Laparoscopic Cholecystectomy," *International Journal of Hepatology*, vol. 2017, Article ID 5497936, 8 pages.

****