



ORIGINAL RESEARCH PAPER

General Surgery

EVALUATION OF GALLBLADDER EXTRACTION FROM UMBILICAL PORT VERSUS EPIGASTRIC PORT IN PATIENTS UNDERGOING LAPAROSCOPIC CHOLECYSTECTOMY

KEY WORDS: Laparoscopic cholecystectomy (LC), gallbladder (GB), incisional hernia, postoperative pain

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ABSTRACT

Laparoscopic cholecystectomy (LC), introduced in 1987, is now the preferred method of cholecystectomy. Laparoscopic cholecystectomy has revolutionized the surgical management of gallbladder (GB) diseases by reducing postoperative pain, risk of surgical site infection and incisional hernia. Laparoscopic cholecystectomy is also reported to have an edge over open cholecystectomy due to shorter hospital stay, early return to work and overall low cost. The use of LC in the management of gallbladder disease has shown several advantages over open cholecystectomy such as reduced postoperative pain, reduced risk of surgical site infections, quicker recovery and reduced incidence of incisional hernia.

INTRODUCTION:

Laparoscopic cholecystectomy (LC), introduced in 1987, is now the preferred method of cholecystectomy. Laparoscopic cholecystectomy has revolutionized the surgical management of gallbladder (GB) diseases by reducing postoperative pain, risk of surgical site infection and incisional hernia. Laparoscopic cholecystectomy is also reported to have an edge over open cholecystectomy due to shorter hospital stay, early return to work and overall low cost. The use of LC in the management of gallbladder disease has shown several advantages over open cholecystectomy such as reduced postoperative pain, reduced risk of surgical site infections, quicker recovery and reduced incidence of incisional hernia. After laparoscopic cholecystectomy, extraction of the GB is a time consuming and difficult job. Although several techniques and methods are suggested to facilitate the retrieval of GB safely, problems occurring during extraction have not been completely remedied and generally widening of the port site is required. This increases the risk of bleeding, haematoma and infection as well as leaving a risky area for incisional hernia. Serious complications like bowel obstruction due to incarceration of bowel into the fascial defect at the port site may develop. Cases of Richter's hernia that occurred at a port site after laparoscopic surgery have been reported and incidence found to be 0.2% to 3%.

Observation:

Port site	Need of widening of port	Intraperitoneal spillage of bile and stones	Port site bleed
Epigastric port	7(14%)	4(8%)	3(6%)
Umbilical port	3(6%)	3(6%)	0

The need for widening the port site was required in 7(14%) patients in epigastric port group, whereas the need for widening the port site was required in 3(6%) patients in umbilical port group. Intraperitoneal bile and stone spillage were seen in 4(8%) patients of epigastric port group whereas intraperitoneal bile and stone spillage was seen in 3(6%) patients of umbilical port group. Port site bleed at the time of GB extraction was seen in 3(6%) patients of epigastric port group whereas no port site bleeding was found in umbilical port group.

DISCUSSION:

Need For Widening The Port Site

During extraction of GB the need for widening the port site was required in 14% of the patients in epigastric port group, whereas the need for widening the port site was required in 6% of the patients in umbilical port group. Kaya C et al, reported that 18.3% of the patients in the epigastric port group, and 10% of the patients in the umbilical port group

required widening of the port site at the time gall bladder retrieval. The findings were not statistically significant.

Intraperitoneal Spillage Of Bile & Stones

In the present study, intraperitoneal bile and stone spillage occurred in 4(8%), patients in epigastric port group and in the umbilical port group the spillage of bile and stones occurred in 3(6%) patients. Memon J et al, in a study of 1800 patients noticed incidence of the spillage of stones in 1.44% and 0.44% in the epigastric port group and umbilical port group respectively. Kumar TS et al, in a review of LC reported an incidence of 6-30% spillage of gall stone.

Port Site Bleed

In the present study, port site bleed at the time of GB extraction was seen in 6% of the patients of epigastric port group whereas no port site bleeding was found in umbilical port group (p<.001 significant). Memon J et al, observed that port site bleeding was seen in 4% of the study participants in the epigastric port group, while in the umbilical port group it was found to be 1.33%. This is in concordance with the present study.

CONCLUSION:

- The need for widening the port site was required in 7 (14%) patients in epigastric port group, whereas the need for widening the port site was required in 3(6%) patients in umbilical port group.
- Intraperitoneal bile and stone spillage were seen in 4(8%) patients of epigastric port group whereas intraperitoneal bile and stone spillage was seen in 3(6%) patients of umbilical port group.
- Port site bleeding at the time of GB extraction was seen in 3(6%) of the patients of epigastric port group whereas no port site bleeding was seen in umbilical port group (p<.001 significant).

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