

Study of Port Site Infection in Patient Undergoing Laparoscopic Cholecystectomy in Patna Medical College and Hospital Bihar

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Abstract

Original Research Article

Minimally invasive surgery especially laparoscopic cholecystectomy has become the gold standard procedure for removal of gall bladder now a day. It offers advantage of rapid postoperative recovery, less pain short hospital stay and early return to normal life style. Till now no surgical procedure are 100% devoid of complication. so these laparoscopic cholecystectomy are also associated with many complication like assess related such as major vascular injury, bowel injury, pneumoperitoneum related, SSI such as port site infection. The main aim of this study was to assess the port site infection and its management. 100 patients undergoing lap cholecystectomy was included in this study. All of them were given prophylactic antibiotics before the surgery and the surgery was carried out under general anaesthesia. It was found that 5.8% patient had port site infection. The most common site was umbilical port with 56.2% cases followed by epigastric 34%. Finally it is recommended to follow proper sterilization technique to minimise port site infection.

Keywords: Minimally invasive surgery, laparoscopic, surgical, pneumoperitoneum.

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INTRODUCTION

Minimally invasive surgery especially laparoscopic cholecystectomy has become the gold standard procedure for removal of gall bladder now a day. It offers advantage of rapid postoperative recovery, less pain, short hospital stay and early return to normal life style. It causes cosmetically less scarring. Complications like assess related such as major vascular injury, bowel injury, pneumoperitoneum related are very rare [1, 2]. Others are SSI such as port site infection. The main aim of this study was to assess the port site infection and its management. The rapid advancement in science in CCD cameras and flexible light sources have made the laparoscopy affordable widely available. The overall rate of complication following laparoscopic surgery is approximately 1.4 per 1000 procedures [3]. However incidence of port site complication is around 21 per 100,000 cases [4]. The overall complication that happen during laparoscopic procedure involve, GI (0.06%), genito urinary(0.03%), vascular(0.01%) and omentum (0.04%)[5]. However other rare complication include port site mets, port site infection.

The main aim of our study was to assess port site infections and its prevention and management.

MATERIALS AND METHODS

Study area-department of general surgery Patna medical college Patna Bihar. Sample size-total of 100 case.

Inclusion criteria

All patients undergoing laparoscopic cholecystectomy

Exclusion criteria

Those cases which get converted to open cholecystectomy were excluded. Preoperative preparation-shaving of the area, bath with antiseptic soap, prophylactic antibiotic and all patients asked to go to toilet to void urine just before surgery.

Surgery were performed under GA. Reusable metallic ports were used after sterilization with cidex. Veress needle was used to create pneumoperitoneum followed by insertion of trocars. No any bag was used for removal of gall bladder.

After surgery thorough toileting of liver bed done and ports were cleaned and closed.

RESULTS

- Incidence of port site infection was 7.89%. It was comparable with a study done by Mir et al in which PSI WAS 6.7% [6].
- All PSI were superficial and subcutaneous without any serious complications. Similar finding was reported by Adisa *et al.* in his study.
- The most common port site infection was observed in umbilical port followed by epigastric.
- Infections was treated with drainage, packing and suitable antibiotics mainly flouroquinolones without any serious outcome.

DISCUSSION

For many surgical diseases, laparoscopy is becoming procedure of choice due to patient's fast recovery, less pain short hospital stay, less scar, less chance of incisional hernia, affordable and its wide spread availability. Nevertheless procedures require good training and experience to minimise its complication.

Just like open surgery laparoscopic surgery is also not without complications. Port site complication can be grouped into post-operative complications and assess related complications, and these have been reported in both male and female and in all age group.it has been reported that obesity is a risk factor for PSI.

CONCLUSION

Laparoscopy offers advantage of fast post-operative recovery with acceptable cosmesis. Moreover the port site complications are rare and can be further minimised by proper selection of patients, good sterilization technique, cleaning of instrument in running water and regular change of cidex at acceptable interval. All these methods help in minimising port site infection.

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