ABSTRACT

BACKGROUND AND OBJECTIVE

Laparoscopic techniques have revolutionized the field of surgery and offer several advantages over laparotomy including lower patient morbidity rates, reduced hospital length of stay and earlier return to normal activities. Although rare, several port site complications have been reported in the literature. Laparoscopic port site complications can be access-related or post-operative. Complications are related to port-site incision size, number of port sites, obesity, and umbilical ports. The objective of this study is to determine the morbidity associated with ports at the site of their insertion in laparoscopic surgery, to identify risk factors for complications and their management.

METHODS

All patients who underwent laparoscopic surgeries, between October 2016 and September 2017, at GRH, Madurai, in the Department of General Surgery, were included in the study after taking a written consent and port sites were monitored for complications. A total of 100 cases were operated upon. Out of 100 cases 45 undergo cholecystectomy, 20 had appendectomy, 10 had diagnostic laparoscopy, 6 had adhesiolysis, 6 had lap APR, and the remaining 3 cases did gastropexy, splenectomy and ligation of testicular vein for varicocole respectively. Wounds were assessed clinically after surgery and in case of infection, were treated with regular cleaning and dressing, with empirical oral antibiotics. PSI was studied in relation to frequency, type of surgery, and port position. Similarly, port site bleeding, was studied in relation to frequency, site, type of ports, and size of ports. Omentum related complications were studied in relation to frequency, type of surgery, number of ports, and the port site involved. Further port site complications were studied in relation to age, sex, body mass index (BMI), total number of ports used, technique of port closure, and procedure performed. Data collected and analysed by various statistical method. RESULT: Of the 100 patients undergoing laparoscopic surgery, 40% had developed complications specifically related to the port site during a minimum follow-up of one year period; port site discharge (PSD) was the most frequent (n = 14, 14%), followed by port site infection (n = 11, 11%), bleeding (n=5, 5%), PIH (n=6, 6%), PSM (n=4, 4%) omentum-related complications nil.
CONCLUSION: Laparoscopic surgeries are associated with minimal port site complications. Complications are related to the increased number of ports. Umbilical port involvement is the commonest. Most complications are manageable with minimal morbidity, and can be further minimized with meticulous surgical technique during entry and exit.

Keywords

Laparoscopic surgery, key hole surgery, port site complications