ABSTRACT

A COMPARATIVE STUDY ON CONTINUOUS AND INTERRUPTED METHODS OF ABDOMINAL FASCIA CLOSURE IN MIDLINE LAPAROTOMY WOUNDS OF PATIENTS WITH ACUTE PERITONITIS

Background:

Midline laparotomy is the most common surgical exercise performed by general surgeons in emergency settings. Peritonitis being the common cause of emergency midline laparotomy, closure technique of the inflamed and infected midline wound gains importance in regard with seroma, wound infections and wound dehiscence. This study aimed at studying the benefits of interrupted and continuous methods of abdominal fascia closure in midline laparotomy wounds of patients with acute peritonitis.

Methods:

This prospective observational study (Cohort Study) was conducted in Department of General Surgery, Kilpauk Medical College, Chennai for a period of 7 months. 80 patients who underwent emergency explorative laparotomy with midline incision for acute perforative peritonitis were included in the study.
Results:

Out of the 40 patients who underwent closure by interrupted technique, 15% developed wound dehiscense when compared to 35% in continuous technique. Seroma formation was higher in continuous group (23%) than the interrupted group (14%).

Conclusion:

This prospective study proves that the percentage of post-operative surgical site wound complications like seroma, wound gaping, suture sinus are less in interrupted closure when compared to continuous closure in midline laparotomy wounds of patients with perforative peritonitis. This conclusion is of immense clinical importance in reducing the morbidity, hospital stay and health care costs related to the complications in patients undergoing emergency laparotomy.

KEY WORDS:

Peritonitis, midline laparotomy, wound dehiscense, interrupted closure