COMPARATIVE STUDY AND ADVANTAGES OF LAPAROSCOPIC VENTRAL HERNIA MESH REPAIR VERSUS CONVENTIONAL OPEN MESH REPAIR

ABSTRACT

Background :

An incisional hernia develops in 7% to 11% of laparotomy incisions. Laparoscopic repair was applied to the ventral hernias, with the expectation of earlier recovery, fewer postoperative complications, and decreased recurrence rates. This prospective study was performed to compare the outcomes after open and laparoscopic ventral hernia repair.

Methods: It is prospective study involved 55 patients with ventral hernia, were subjected either to repair by laparoscopy or to open repair. The open surgical operations were performed by onlay mesh repair, whereas the laparoscopic repairs were performed using the intra-peritoneal dual mesh IPOM repair technique.

Results:

The mean surgery durations were significantly lower in laparoscopic repair when compared to open repair ($p < 0.001$). The mean duration of post-operative analgesics used in laparoscopic group is 4.3+ 0.50 days as compared to open ventral hernia repair 6.48 ±0.15 days ($p < 0.001$) which is significant. The mean postoperative stay in hospital was shorter for the laparoscopic group than for the

open hernia group (6.3 versus 11.06 days; $p < 0.001$). Antibiotics used in laparoscopy group is for 5.85±0.50 days as compared to open repair 6.48±0.50 days ($p < 0.001$). Return to the activity or normal daily work is significantly low in laparoscopic group as compared to open repair of hernia (2.2 versus 4.34 days; $p < 0.001$). There were fewer post-operative complications in laparoscopy.

Conclusions:

The findings demonstrate that laparoscopic ventral hernia repair in our experience was safe and resulted in shorter operative time, fewer complications; shorter hospital stays, and earlier returns to daily activity. Hence, it should be considered as the procedure of choice for ventral hernia repair.

Key words:

Incisional hernia, Laparoscopic ventral hernia repair, Open retro-rectus mesh repair, Laparotomy