Laparoscopic Versus Open Ventral Hernia Repair With Mesh

Acomparison Study

Thesis

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By

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SUMMARY

Ventral abdominal hernia repair poses a difficult problem for the general surgeon because of the high incidence of recurrence (50%) and a reported 10% infection rate. The use of a mesh by the anterior approach to replace or reinforce the defect has marginally reduced the recurrence rate, but not the infection rate especially in obese patients.

With the evolution of minimally invasive surgery, a potential is present to reduce the postoperative stay, lessen pain, and decrease the incidence of both recurrence and infection. Laparoscopic prosthetic ventral hernioplasty avoids the large wound required in open repairs, with attendant complications and recurrence, and appears to be safe.

This study aimed to evaluate the role of laparoscopic approach in the treatment of abdominal ventral hernia using composite mesh, and to compare it with the conventional open surgery using polypropylene mesh.

The study included laparoscopic and open surgery group with 10 patients in each group.

For both groups we analysed the demographic and clinical data relevant to age, sex. Previous surgery, size and location of hernias, operative time, intraoperative and postoperative complications, length of hospital stay, follow up evaluation and hernia recurrence.

Our results suggest that laparoscopic ventral hernia repair is safe, effective and technically feasible operation with reduced morbidity, earlier recovery and shorten hospital stay than the open surgery group. The recurrence rate in the laparoscopic group is lower (0%) compared to the open group (10%) for a mean follow up period of 9 and 12 months respectively.

It appears that laparoscopic repair has many advantages over conventional repair in terms of recurrence rate, hospital stay, return to normal activity, and postoperative discomfort. However, laparoscopic repairs demand advanced laparoscopic skills and are not devoid of serious complications, meticulous technique, a high index of suspicion in regard to possible bowel injury, and a liberal and surgically awareness of conversion to open procedure should make this approach a safe and better alternative to open ventral hernia repair.

More cases and Long follow up are required to confirm the efficacy and safety of laparoscopic repair, More prospective randomized trials are required.