

Laparoscopic hernioplasty of large ventral hernia with transfascial sutures: Short term utility and outcome

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ABSTRACT

Introduction: The laparoscopic approach to repairing ventral and incisional hernias has gained increasing popularity worldwide. The approximation of the hernia defect during laparoscopic ventral hernia repair, prior to mesh fixation, provides a more physiologic and anatomic repair. Defect closure also provides more defect overlap with mesh placement and, possibly decreases recurrence rates. We reviewed the experience of laparoscopic repair of large ventral hernia (diameter $\geq 5\text{cm}$) at a university hospital in the Nepal with particular reference to patients with massive defects (diameter $\geq 15\text{cm}$) and transfascial closure.

Methods: A total of 32 patients underwent laparoscopic ventral (incisional or umbilical/paraumbilical) hernia repair between July 2014 and September 2015.

Results: The prevalence of conversion to open surgery was 3.1%. The prevalence of postoperative complications was 15.6%. Median postoperative follow-up was 8.2 months. A total of 9.4% cases suffered late complications and 3.1% developed recurrence. Twelve patients underwent repair of defects $\geq 10\text{cm}$ in diameter with no recurrence. Three patients underwent repair of 'massive' incisional hernia (diameter $\geq 15\text{cm}$) with a prevalence of recurrence of 3.1%. Ten patients with a body mass index (BMI) $\geq 30\text{kg/m}^2$ (range, 32–35 kg/m^2) underwent laparoscopic repair without any recurrence.

Conclusions: Laparoscopic ventral hernia repair with transfascial suturing can be carried out safely with a low prevalence of recurrence. It may have advantages in obese patients in whom open repair would represent a significant undertaking. Laparoscopic ventral hernia repair may be used in cases of large and massive hernias, in which the risk of recurrence increases but is comparable with open repair and associated with low morbidity.