Hybrid Ventral Hernia Repair: A Boon for Large Hernias

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Abstract

A case series of the 8 case in ventral hernia repair by the Hybrid method. A study was conducted in the Shanmuga hospital and salem cancer institute, Salem, Tamil nadu.

Total 8 No of the case included in the case series study.

Keywords: Ventral Hernia; Laparoscopic; Polypropylene.

Background

Both open and laparoscopic approaches to large ventral hernia repair have been the dictum till now. This method offers many advantages: minimal pain, shorter stay in hospital, quicker return to activities, and ability to identify additional defects in the abdominal wall [1]. many authors have highlighted the lower incidence of perioperative complications and shorter hospital stay in hybrid technique [2].

Methods

A single surgeon experience in our institution consisting of eight patients who underwent

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combined laparoscopic and open approaches for ventral hernia repair. Records were reviewed for technical details, demographics, hernia and mesh characteristics, and postoperative outcomes.

Results

The techiniques used commonly for these patients were initial laparoscopic assement and adhesiolysis then converted to open adhesiolysis if any remaining difficult adhesions and rectus closed with size 1 polypropylene followed by totally laparoscopic mesh fixation with tackers. we used in all patients provisc 3d dual composite mesh and in two patients open repair and adhesiolysis with laparoscopic-assisted mesh fixation where in soon after releasing the adhesions the mesh was placed inside and corners were sutures and rectus closed and followed by laprascopically trackers were used to secures mesh firmly.



Fig. 1:



Fig. 2:

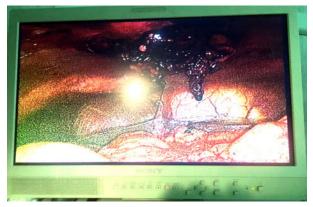


Fig. 3:



Fig. 4:

And in One case where rectus was not approximating relaxing incisions were made bilaterally by laprascopic method prior to open after lap assessment. Mean patient age was 52 years and BMI 35.

Mean defect size was $10 \text{ cm} \times 8 \text{ cm}$ and mean mesh size was $15 \text{ cm} \times 20 \text{ cm}$. Operative time was 180 min (110-250 min). Hospital stay was 5 days (4-7 days). There were no intra operative or post operative complications. There were no hernia recurrences with average follow-up of 12 months (3-24 months).

Conclusions

Hybrid laparoscopic and open techniques may be comfortably used in large to medium sized hernia defect patients. Further studies need to be done to better delineate hernia characteristics of patients that may benefit from this approach.

References

- 1. Carlson MA, Frantzides CT, Shostrom VK, et al. Minimally invasive ventral herniorrhaphy: an analysis of 6,266 published cases. Hernia. 2008; 12: 9–22.
- McKinlay RD, Park A. Laparoscopic ventral incisional hernia repair: a more effective alternative to conventional repair of recurrent incisional hernia. J Gastrointest Surg. 2004; 8:670–4.
- 3. Bencini L, Sanchez LJ, Bofii B, et al. Incisional hernia repair retrospective comparison of laparoscopic and open techniques. Surg Endosc. 2003; 17:1546–51.
- 4. Œmietañski M, Bigda J, Iwan K, et al. Assessment of usefulness of different tacks in laparoscopic ventral hernia repair (IPOM) Surg Endosc. 2007; 21:925–8.
- Trojanowski P, Kwiatkowski A, Paœnik K, et al. Modern methods of treatment of incisional hernias. Pol Merk Lek. 2009; 26:569–71.