HOW TO DO MINI-OPEN IPOM REPAIR FOR RARE TROCAR SITE HERNIA AND SMALL VENTRAL HERNIA WITH VENTRALEX™ ST HERNIA PATCH

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ABSTRACT

BACKGROUND

Intraperitoneal onlay mesh (IPOM) technique is used in laparoscopy for abdominal hernias. But for hernias with small defects VentralexTM ST hernia patch can be used. This is a new technique where IPOM is used in open technique rather in laparoscopy.

KEYWORDS

Trocar Site Hernia, Port Site Hernia, IPOM Technique, Mini-Open IPOM.

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BACKGROUND

A 45-year-old gentleman came with complaints of swelling in the umbilicus and dragging pain for two weeks after four months of laparoscopic to open cholecystectomy. The size of the swelling increased on strenuous activities and decreased on lying posture. He does not smoke and has no comorbid medical illness. He was not on any chronic medications for any medical illness. On examination, there was a painless, doughy, hemispherical swelling of size 2 x 2 cm in the 10 mm Trocar site region with a scar and cough impulse. The clinical diagnosis was Trocar Site Hernia (TSH) (Fig 1A). The size of the defect by imaging was 1 cm. The patient was assessed under ASA-I. The defect was closed by elective mini-open IPOM technique using Ventralex[™] ST Hernia patch. His immediate post-operative followup was uneventful.

How to do it

Intraperitoneal Onlay Mesh (IPOM) technique is a novel repair of hernial defects by laparoscopy.^[1,2] Mini-IPOM technique is used in laparoscopic bariatric surgery to prevent TSH.[3] Ventralex[™] ST hernia patch is a type of IPOM coated with seprafilm as an adhesion barrier. It is used for a small ventral hernial defect especially umbilical, paraumbilical and epigastric hernia.^[4] Mini open IPOM technique is a new technique using IPOM in smaller defects. The procedure is done under spinal anaesthesia as a day care procedure. It can also be performed under local anaesthesia and blocks. It avoids extensive dissection for small defects in the abdominal wall. An appropriate mini incision is made around the TSH. The hernial sac is identified and opened (Figure 1B). The contents of the TSH sac are reduced after releasing the adhesion between the contents and the sac. The size of the defect is measured and appropriate size of the mesh is chosen. It is made sure by insinuating the finger that there are no adhesions in the peritoneum for the size of the mesh to be

Financial or Other, Competing Interest: None. Submission 12-08-2016, Peer Review 01-12-2016, Acceptance 06-12-2016, Published 27-12-2016. Corresponding Author: Dr. Varun Araunagiri, Assistant Professor, Department of General Surgery, Institute of General Surgery, Madras Medical College, Chennai, Tamilnadu. E-mail: surgeonvarun@yahoo.com deployed intraperitoneally (Figure 1C). The appropriate sized Ventralex[™] ST hernia patch is soaked in normal saline just before the deployment of the mesh and placed intraperitoneally (Figure 1D). The string in the Ventralex[™] ST mesh is fixed to the rectus defect. The excess string is cut. The defect in the rectus sheath is closed. Skin is closed using skin staplers or skin sutures. The advantages of the mini open IPOM technique are small incision, short duration of surgery, minimal dissection like in open Trocar placement in laparoscopy.^[4] The disadvantage of this technique is that it is useful only for the small defects.^[5]



Figure 1A. Trocar site Hernia (TSH)



Figure 1B. TSH sac Opened



Figure 1C. TSH sac Adhesion and Omentum reduced



Figure 1D. Ventralex™ ST Hernia Patch deployed

REFERENCES

- 1. Sarli L, Pietra N, Choua O, et al. Laparoscopic hernia repair: a prospective comparison of TAPP and IPOM techniques. Surg Laparosc Endosc 1997;7(6):472-6.
- 2. Schmidt J, Carbajo MA, Lampert R, et al. Laparoscopic intraperitoneal on lay polytetrafluoroethylene mesh repair (IPOM) for inguinal hernia during spinal anesthesia in patients with severe medical conditions. Surg Laparosc Endosc Percutan Tech 2001;11(1):34-7.
- Moreno-Egea A. How to prevent trocar-site hernia? A totally atraumatic endoscopic mini-IPOM-plug technique (with extra-lightweight titanium-coated mesh and glue). Surg Laparosc Endosc Percutan Tech 2015;25(3):e106-8.
- Tollens T, Den Hondt M, Devroe K, et al. Retrospective analysis of umbilical, epigastric, and small incisional hernia repair using the Ventralex[™] hernia patch. Hernia 2011;15(5):531-40.
- 5. Berrevoet F. Intraperitoneal mesh repair of small ventral abdominal wall hernias with a Ventralex hernia patch': a critical note. Dig Surg 2011;28(5-6):372.