Laparoscopic Ventral Hernia Repair

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Indication

Ventral hernia

Essential Steps

- 1. General anesthesia.
- 2. Insufflate abdomen either using Veress needle, Hasson cannula, or Optiview trocar.
- 3. Place initial trocar.
- 4. Insert laparoscope and inspect the abdomen.
- 5. Place additional trocars.
- 6. Lyse adhesions as needed.
- 7. Mark boundaries of the hernia defect.
- 8. Perform primary fascial closure.
- 9. Cut mesh to size.
- Orient mesh with Ethibond suture outside the abdomen and then insert via a 12-mm trocar.
- 11. Nonadherent side of mesh toward the bowel.
- 12. Collapse the abdomen to pressure of 8–10 mmHg.
- 13. Place transfascial sutures to anchor mesh with 3–5-cm overlap on all sides of the hernia.
- 14. Tack mesh to abdominal wall at key points (e.g., corners).
- 15. Place additional transfascial sutures.

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16. Tie sutures.

17. Check hemostasis.

18. Close.

Note These Variations

- · Orogastric tube
- Abdominal access: Veress needle, Hasson cannula, or Optiview trocar
- Cutting or muscle-splitting trocars
- · Fascial closure followed by underlay of mesh
- Closing of trocar sites
- Type of mesh

Complications

- Injury to the bowel, bladder, or inferior epigastric vessels from trocar placement
- Mesh migration
- · Mesh infection
- Hernia recurrence
- · Chronic abdominal pain

Template Operative Dictation

Preoperative Diagnosis Initial/recurrent ventral hernia

Procedure Laparoscopic ventral hernia repair

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Postoperative Diagnosis Same

Description of Procedure The patient was brought into the operating room and placed on the table in the supine position. Time-outs were performed using both preinduction and pre-incision safety checklists to verify correct patient, procedure, site, and additional critical information prior to beginning the procedure. General anesthesia was administered. All bony prominences were padded. Both arms were tucked. *A Foley was placed. An orogastric tube was placed.* The abdomen was prepped from the xiphoid to pubis and table to table with *chlorhexidine/Betadine/other*. The patient was draped in the usual sterile fashion. *Ioban was used.*

[Choose One:]

If Veress needle: The fascia was elevated and the Veress needle inserted at the (describe location). Proper position was confirmed by aspiration and saline meniscus test.

If Hasson cannula: An incision was made at the (describe location). Dissection was carried down until the level of the fascia. The fascia was elevated and incised. Entry into the peritoneum was confirmed visually. Two figure-of-eight sutures of 2-0 Vicryl were placed and the Hasson cannula inserted under direct vision. The sutures were anchored around the cannula.

If Optiview trocar: An incision was made at the (describe location). The Optiview trocar was inserted into the abdominal cavity under direct visualization.

The abdomen was insufflated with carbon dioxide to a pressure of 15 mmHg. The patient tolerated insufflation well. A ____-mm trocar was inserted. The laparoscope was inserted and the abdomen inspected. (Describe normal and abnormal findings.) Under direct visualization, additional trocars were placed in the following location: describe locations. There was minimal/moderate/significant amount of

omental/bowel adhesion to the hernia defect. Lysis of adhesion was performed using laparoscopic shears/other devices. ___ min/h was spent performing adhesiolysis. No serosal tear or enterotomy/describe others was noted after adhesiolysis was completed. Examination of the abdominal wall revealed the hernia to be ____ (describe size and findings such as multiple defects).

If primary repair: Using a GraNee needle/other, the hernia defect was closed with interrupted 0 Ethibond/other sutures. ___number of sutures were placed approximately 1 cm apart.

Mesh repair was then performed. A Proceed/
Parietex Composix mesh/other which measured
___ × ___ cm was used for repair of this ventral
hernia, with a ___-cm circumferential overlap of
mesh under the hernia defect. Extracorporeally,
the mesh was oriented. ___ 0 Ethibond sutures
were placed at the four quadrants of the mesh to
serve transfascial anchoring sutures. The mesh
was rolled into a tight cigar-like configuration
and was introduced through the right upper quadrant 12-mm port.

The mesh was unraveled and proper orientation of the mesh was maintained throughout the entire procedure, with the nonadherent hydrocellulose-coated side of the mesh facing the bowel. *The abdominal insufflation pressure was decreased to 8–10 mmHg.* After proper positioning of the mesh, a *GraNee needle/other device* was used to pull the transfascial sutures out at corresponding stab incisions.

After the transfascial sutures were tied down, the mesh was tacked using a *Tacker/AbsorbaTack/other device*. Crowning was done with a second row of tacks circumferentially. After the mesh was tacked in its entirety, ___ additional transfascial sutures were placed along the edge of the mesh in a circumferential fashion.

The abdominal cavity was inspected and the hernia repair appeared satisfactory. The trocars were removed under direct vision and the abdomen deflated. *All trocar sites greater than 5 mm were closed with* _____.

The skin was closed with 4-0 Monocryl/Vicryl/other. Benzoin/Steri-Strips/Glue

was applied. The port sites and transfascial suture sites were infiltrated with ___ cc of 1% lidocaine/2% lidocaine/0.25% Marcaine/other. An abdominal binder was then placed.

A debriefing checklist was completed to share information critical to postoperative care of the

patient. The patient tolerated the procedure well and was brought to the PACU in stable condition.

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