

Laparoscopic Closure of Trocar Defects using Riza-Ribe® Needle

Load ligature to Riza-Ribe® Needle by pushing plunger, threading ligature in open loop and releasing plunger (Fig. B and C).



Fig. A Riza-Ribe® Needle

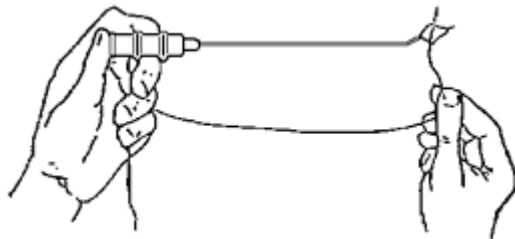


Fig. B

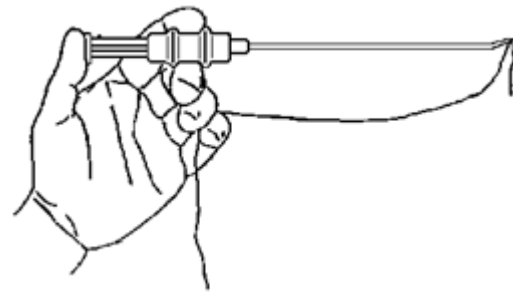


Fig. C

The Riza-Ribe® Needles are used during laparoscopy for the Closure of Trocar Induced Fascial Defects.

1. At the end of laparoscopic procedure, select plug that matches your trocar (e.g. 10 mm plug will match 10 mm trocar). Release trocar and remove (Fig. 1).
2. Immediately place gloved finger over skin opening to retain pneumoperitoneum.
3. Place R-Med® Plug into defect (Fig. 2).
4. Under Laparoscopic visualization ensure that distal end of the R-Med® Plug is aligned at the peritoneal surface (Fig. 3). This will align the Riza-Ribe® Needle to pass 16-17 mm above the peritoneum, which will be above the fascial level.
5. Load Riza-Ribe® Needle with a suture (e.g., Chromic, Vicryl O) as shown (Fig. B and C).
6. Thread the suture loaded Riza-Ribe® Needle down the groove on one side of the R-Med® Plug (Fig. 4) through fascia on the opposite side of the plug, into the peritoneal cavity.
7. Release the suture, and withdraw the empty Riza-Ribe® Needle back through the R-Med® Plug.
8. Thread the empty Riza-Ribe® Needle down the remaining groove, through fascia on the opposite side of the plug, into the peritoneal cavity.

9. Load the free suture end into the Riza-Ribe® Needle (Fig. 5 and 6) with the help of a grasper or a needle holder.
10. Withdraw loaded Riza-Ribe® Needle back through the R-Med® Plug, and release the suture.
11. After all sutures are in place, remove the R-Med® Plug while tightening on the sutures (Fig. 7).
12. Lower the abdominal pressure to reduce distention, allowing better approximation of the fascia under lower stresses.
13. Tie sutures under direct visualization (Fig. 8).
14. Subcutaneous and skin approximation can be performed to surgeon's choice.
15. For Single Patient Use Only. Properly dispose of device in accordance with local regulations.

CLOSURE OF MULTIPLE TROCAR DEFECTS

16. Place another R-Med® Plug or matching plug into second defect (steps 1-3) to retain pneumoperitoneum.
17. Introduce a 5mm grasper or needle holder through the axial bore of the first R-Med® Plug.
18. Place sutures in additional R-Med® Plugs as outlined above (steps 4-10).

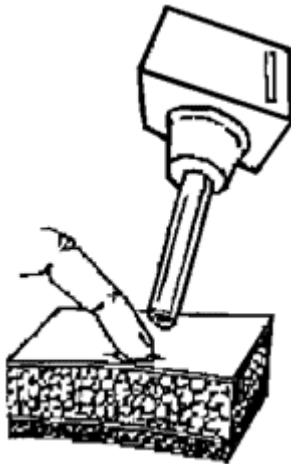


Fig. 1

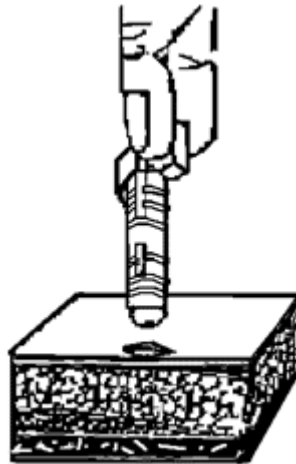


Fig. 2

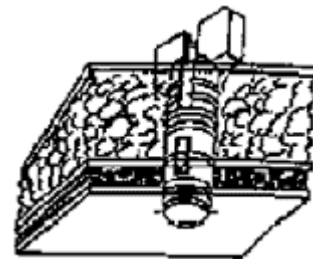


Fig. 3

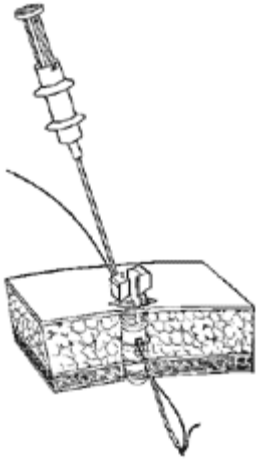


Fig. 4

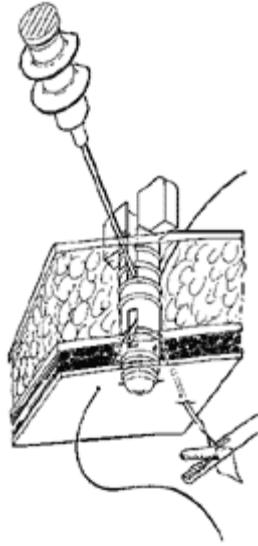


Fig. 5

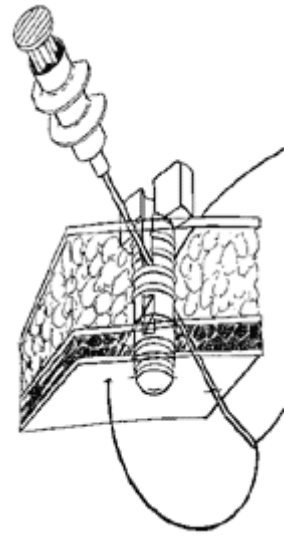


Fig. 6

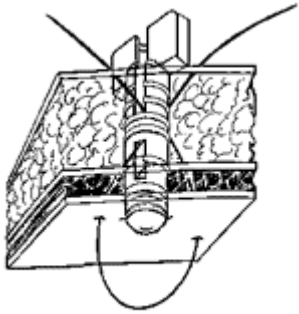


Fig. 7

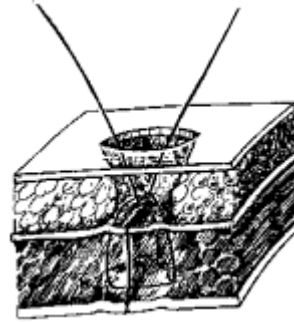


Fig. 8