

First Application of Controlled Intraoperative Fascial Traction for Loss-of-Domain Hernia Repair in Saudi Arabia

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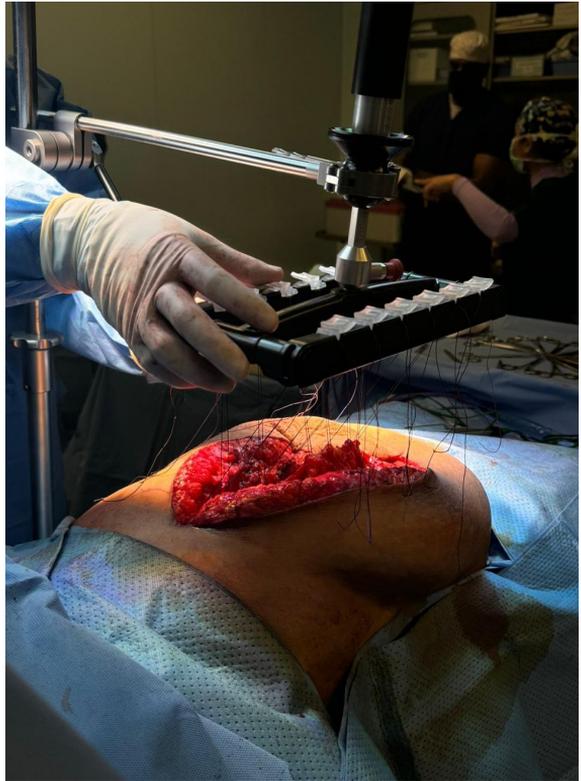
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Aim

To report the first successful application of controlled Intraoperative Fascial Traction (IFT) in Saudi Arabia for low-tension closure of a loss-of-domain hernia, offering a less invasive alternative to traditional component separation techniques.

Material & Methods

A 41-year-old female presented with multiple midline incisional hernias, including a giant hernia with loss-of-domain. Preoperative botulinum toxin A injections were administered 8 weeks before surgery to relax the lateral abdominal wall muscles. During the operation, 12 U-shaped absorbable braided sutures (size 1) were placed along the anterior rectus sheath and attached to an intraoperative fascial traction device. Controlled tension of 14 kg was applied over 30 minutes, with intermittent tightening every 2 minutes to progressively approximate the fascial edges. A Gentamycin-soaked polyvinylidene fluoride (PVDF) mesh was placed in the sublay position, and the anterior rectus sheath was closed using the small-bite technique.



Results

Postoperatively, the patient recovered uneventfully. Her intra-abdominal pressure (IAP) remained stable, and pain was well-controlled. She demonstrated steady progress, with early mobilization and diet reintroduction. Drains were removed on postoperative days 3 and 5, and she was discharged in stable condition on day 7. At 2- and 10-weeks follow-up, she reported no pain, exhibited no hernia recurrence, and experienced significant improvement in her quality of life.

Conclusions

This case demonstrates the efficacy of intraoperative fascial traction in achieving low-tension closure in complex hernia repairs. As the first application of controlled IFT in Saudi Arabia, it highlights the potential for broader adoption of this technique to improve outcomes in similar cases globally.



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