

Large Lumbar Hernia: A Difficult and Uncommon Problem

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Introduction:

- Traumatic lumbar hernias are rare acquired posterolateral abdominal wall hernias¹.
- Understanding the options for repair is critical for optimal patient outcome.

Case Description:

- 59-year-old obese female involved in a motor vehicle collision (MVC) sustained a traumatic right-sided lumbar hernia.
- The patient also had a complex right lower abdominal wall laceration and subcutaneous degloving injury which were treated with negative-pressure wound therapy.
- The patient elected for delayed repair of the hernia and lost 60 pounds prior to repair.
- Intra-operatively, an 11 cm x 5 cm hernia defect was encountered beginning at the iliac crest and ending just inferior to the lower pole of the right kidney.
- A retrorectus plane was created by releasing the transversus abdominis. A polypropylene mesh was placed in the retrorectus space overlying the iliac crest and costal margin.
- The hernia sac was imbricated and tacked within the abdomen. A biologic underlay mesh was placed to further bolster the repair intraabdominally.
- Post-operatively, the patient progressed well and at follow-up, had no complications from the hernia repair with no recurrence at one year.

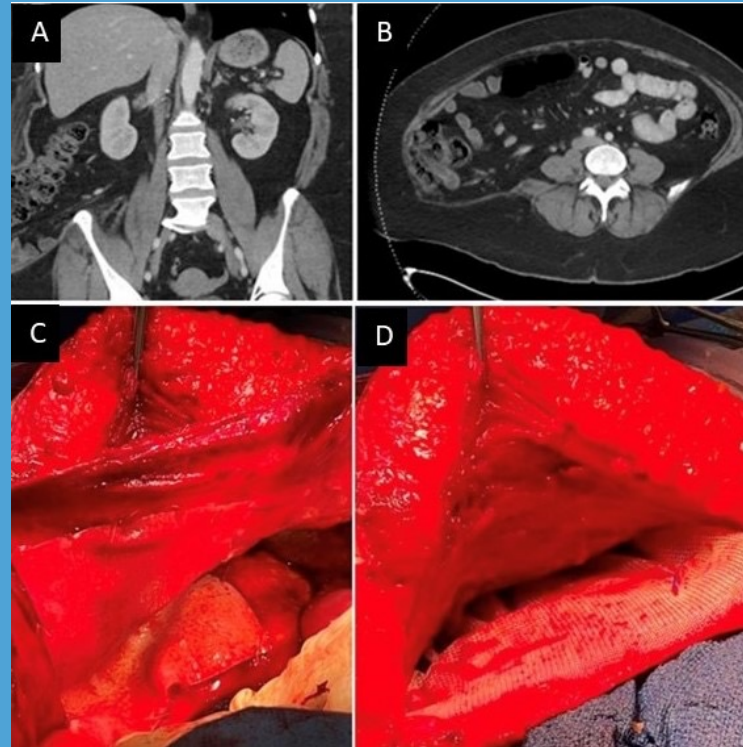


Figure 1. (A) Computed topography (CT) scan with coronal view of large lumbar hernia. (B) CT scan with axial view of large lumbar hernia. (C) Intra-operative photograph of biologic mesh placement. (D) Intra-operative photograph of retrorectus mesh placement.

Discussion:

- Lumbar hernias are most reliably identified using imaging such as a CT scan. Traumatic lumbar hernias occur commonly because of restrained individuals in an MVC¹.
- Hernia formation occurs because of shearing forces applied to the abdominal wall where the fascia and soft tissues are anchored to the iliac crest at the time of impact². As traumatic lumbar hernias may present with other injuries, timing of repair is variable.
- Repair is most successfully accomplished using mesh with either an open or laparoscopic approach.
- While the laparoscopic approach may be preferred, an open repair may be required as in our patient with a large defect and no laparoscopic target to anchor the mesh.

1. Burt BM, Afifi HY, Wantz GE, Barie PS. . Traumatic Lumbar Hernia: Report of Cases and Comprehensive Review of the Literature. *The Journal of Trauma: Injury, Infection, and Critical Care*. 2004; 57 (6): 1361-1370. doi: 10.1097/01.TA.0000145084.25342.9D.
2. Damschen DD, Landercasper J, Cogbill TH, Stolee RT. Acute traumatic abdominal hernia: case reports. *J Trauma*. 1994;36(2):273-276. doi:10.1097/00005373-199402000-00026

Conclusion:

Lumbar hernias are rare and can be challenging to repair for both general and trauma surgeons. This case demonstrates a complex, open surgical approach to repair a large traumatic lumbar hernia not amenable to laparoscopic repair.