

A Rare Cause of Large Bowel Obstruction: Grynfeltt Hernia

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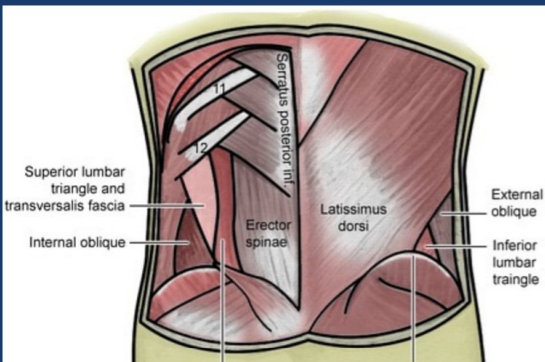
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Introduction

- Lumbar hernias are a rare and can be classified into one of three types:¹
 - Superior (Grynfeltt),
 - Inferior (Petit),
 - Diffuse
- All three types are exceptionally rare and pose significant diagnostic challenges as their appearance often mimic a simple lipoma or abscess.²
- Grynfeltt hernias constitute fewer than 2% of lumbar hernias with about 300 reports in the literature.
- Pathophysiology is a weakness in the superior lumbar triangle:³
 - Twelfth rib
 - Internal oblique
 - Anterior border of the erector spinae
 - Inferior serratus muscle
 - Transversus abdominis aponeurosis
 - Latissimus dorsi

Anatomy of the Lumbar Triangles³



Case Description

- A 52-year-old male with a past medical history of intravenous drug use, tobacco use, hepatitis C, and previously reducible fat containing left lumbar hernia presented to the emergency department (ED) after two days of left flank pain associated with subjective fevers, chills, nausea, and vomiting.
- He had normal bowel function with a bowel movement the night prior to presentation.

- Vitals:** T 101.4°F, HR 138 bpm, BP 154/98 mmHg
- Labs:** WBC 16.8k/mm³, COVID19 positive
- Physical Exam:**
 - Alert, no acute distress, coughing
 - Tachycardic, no MRG
 - Coarse breath sounds bilaterally
 - Large bulge on his left flank consistent with known hernia without overlying skin changes, tender to deep palpation, only partially reducible

Discussion

- Many of these hernias remain asymptomatic, however, about 25% will incarcerate and 10% strangulate.⁴⁻⁶
- Grynfeltt hernias are most frequently unilateral, left sided, and more often occur in 50–80-year-old males.⁴
- Predisposing factors are thought to include age, obesity, pregnancy, and any pathology that increases intra-abdominal pressures.¹
- The gold standard in managing these hernias is surgical intervention.
- Intervention can be approached with a variety of techniques including open, laparoscopic, and robotic repair.⁷
- Mesh is frequently used⁸ and is largely favored; however, primary repair can be done.⁷

Medical History

PMH: Hepatitis C, intravenous drug use, lumbar hernia
PSH: Tonsillectomy
Allergies: NKDA
Medications:

- Methadone
- Polyethylene glycol
- Pantoprazole
- Vortioxetine

Hospital Course and Plan

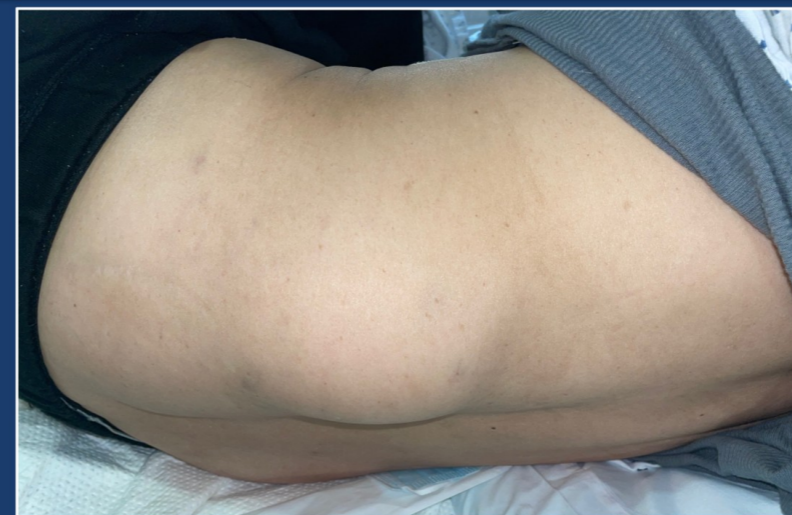
- Initially, his hernia could not be fully reduced and attempts to reduce the contents resulted in immediately reherniation.
- He was admitted to the surgical service with a plan for operative intervention after convalescence from his COVID19 infection.
- Fortunately, a repeat attempt at reduction was successful which resulted in immediate abatement of his abdominal pain.
- Because of his COVID infection and smoking history, it was determined that elective repair would be the safest option and he was discharged home.

Case Images



CT Scan

Acute large bowel obstruction involving the descending colon into a left lumbar hernia.



Examination

In right lateral decubitus position, a large bulge is appreciated at the superior lumbar triangle.

Conclusion

- Grynfeltt hernias are extremely rare abdominal wall hernias.
- Their appearance can mimic a large lipoma making imaging paramount.
- Incarceration is common.
- Management is surgical repair optimally with mesh.

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