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Lumbar Hernia: An Unusual Cause of Back Pain

Urgent message: Back pain is a common complaint in the urgent care setting. Common causes of musculoskeletal back pain include overuse and work-related injury. Other causes can include disc herniation, metastasis, osteoporosis, arthritis, spinal stenosis, and nephrolithiasis.

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Case Presentation

A 65-year-old female complained of 1 day of low back pain radiating to her left flank, which was aggravated with movement. Symptoms began while at work. Patient denied nausea, vomiting, diarrhea, fever, urinary frequency, urinary urgency, dysuria and hematuria, bowel or bladder dysfunction, or lower-extremity or gluteal paresthesias. On her physical exam, paravertebral muscle spasm was appreciated with mild midline tenderness and no mass. Neurological sensation was intact. Motor strength was 5/5 and reflexes 2+ in the lower extremities bilaterally. Lumbar radiographs were negative, without acute findings. Patient was diagnosed with lumbar strain and treated with cyclobenzaprine (Flexeril) and naproxen sodium (Naprosyn).

The patient returned the following day due to her inability to perform normal work activities. She complained of left flank pain radiating to her left abdominal region. Abdominal and flank palpation elicited mild left lower quadrant tenderness. Urinalysis did not show evidence of blood or infection. A CT of the abdomen and pelvis without contrast was ordered to evaluate for a ureteral stone, diverticulitis, or incarcerated hernia. Radiology reported an incidental left posterior flank soft tissue lipoma; the scan was otherwise unremarkable. Patient was advised to continue with current medication, rest, and return in 2 days for reevaluation.

Upon the third visit, the patient reported persistent left flank pain with radiation to the left inguinal region. Repeat urinalysis was within normal limits. A radiologist was called to discuss and review previous CT scan of the

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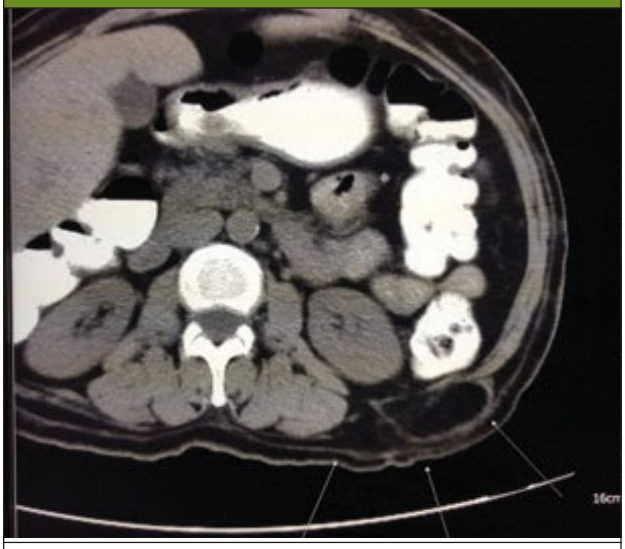
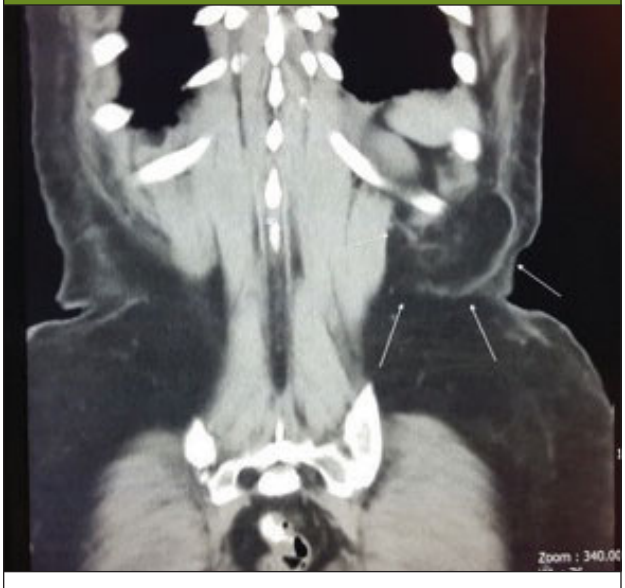
Figure 1.



Axial image from CT scan abdomen without contrast. Retroperitoneal fat (arrows) can be seen at the level of the lower pole left kidney, just below 12th rib, herniating through the posterior abdominal wall to the left flank.

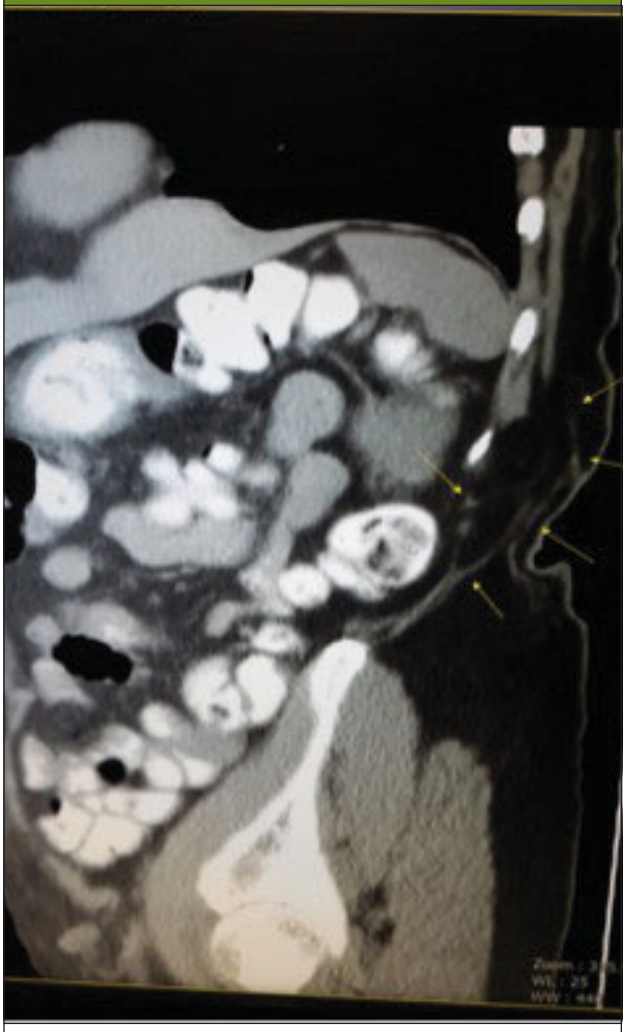
Figure 2.



Coronal image from CT scan abdomen with oral contrast. Herniated retroperitoneal fat (arrows) just inferior to left 12th rib, extending into the left flank subcutaneous tissues.

abdomen and pelvis. Upon further review, it was noted that the previously described left flank fatty lesion was herniated fat posterior to the left kidney which progressed through the superior lumbar triangle.

Figure 3.



Sagittal image from CT scan abdomen with oral contrast. Herniated retroperitoneal fat (arrows) projecting posteriorly and laterally at the left 12th rib level, into the extraperitoneal flank region.

CT scan showed a lumbar hernia at the level of L1/L2, consistent with the patient's current symptoms. (See **Figures 1–3**.)

Discharge Instructions

Patient was advised to follow up with general surgery.

Discussion

The differential diagnosis of low back pain is broad. Though older adults can experience pain related to any condition affecting younger adults, patients over

60 years of age are more likely to have pain related to degeneration of the spinal joint, including osteoporosis and spinal stenosis. Consideration should also be made for neoplasm, infection, and abdominal aortic aneurysm.

Red flags for serious causes of back pain include fever, weight loss, numbness, history of malignancy, nighttime pain, and urinary retention or incontinence. Chronic undifferentiated low back pain (>6 weeks) may also deserve additional work-up.

A lumbar hernia is a rare entity, with <300 cases reported in the literature.[1] Symptoms can vary and may be difficult to distinguish between other etiologies. Palpation of both superior and inferior triangles may confirm an important clinical finding, a bulge.[2] However, a palpable mass or bulge in the lumbar area does not need to be appreciated, as seen in our case. The ability to diagnose a lumbar hernia during the initial patient visit may be challenging without further diagnostic testing, such as a CT scan.

The superior lumbar triangle is bordered by the 12th rib superiorly, iliac crest inferiorly, erector spinae muscle medially, and posterior oblique muscle laterally.[3] There are two types of hernias that are determined by their anatomical location—the superior lumbar hernia (Grynfeltt-Lesshaft hernia), as in this case, and the inferior lumbar hernia (Petit hernia). If initial treatment fails and clinical symptoms do not correlate with radiological exam, it is important to reevaluate past diagnostic imaging and question initial radiology reports.

The most effective treatment approach is best determined by properly identifying classification, size, location, and contents of defect with CT imaging, which allows surgeons to choose which method (open vs laparoscopic) to perform.[4] Surgical repair with synthetic mesh has been found to be successful with minor complications and tissue damage.[5]

Conclusion

Since lumbar hernias are rare, diagnosis may often be made retrospectively. In this case, the symptoms were not consistent with the initial radiological interpretation. When clinical suspicion is discordant with an imaging study, direct consultation with a radiologist can often help in establishing an unusual diagnosis. ■

Summary

- Lumbar hernia is an uncommon diagnosis in any setting, but it bears consideration because urgent care is a frequent destination for patients with low back pain.
- Symptoms of lumbar hernia may not be consistent with the initial radiological interpretation.
- CT scan is the best choice for imaging to identify a lumbar hernia.
- Back pain accompanied by any of the following may warrant more intensive evaluation:
  - fever
  - weight loss
  - numbness
  - history of malignancy
  - nighttime pain
  - urinary retention or incontinence
  - chronic undifferentiated back pain lasting >6 weeks
- While the differential diagnosis of low back pain is broad, patients over age 60 are more likely than younger patients to have pain related to degeneration of the spinal joint, including osteoporosis and spinal stenosis. Neoplasm, infection, and abdominal aortic aneurysm should also be considered.

References

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