70 year old male presents with low back pain status post mechanical fall

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Patient Presentation

• HPI: 70 y/o male presents after fall at nursing home. Pt fell backwards hitting his back and the back of his head against the wall. Pain is 10/10 in lumbar spine and 5/10 in posterior neck. Pt was unable to ambulate after fall. Denies LOC, N/V, dizziness, numbness, and weakness

• PMH: COPD, CAD, ESRD on HD, HTN, RA

• PSH: N/A

• Social: N/A

• PE: Lower lumbar spine and neck tender to palpation, no erythema or swelling
Pertinent Labs

- Hgb: 9.8 ↓
- WBC: 7.89
- Platelets: 29 ↓
- BUN: 45 ↑
- Creatinine: 6.13 ↑
What Imaging Should We Order?
Select the applicable ACR Appropriateness Criteria

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<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>Relative Radiation Level</th>
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</thead>
<tbody>
<tr>
<td>CT thoracic and lumbar spine without IV contrast</td>
<td>Usually Appropriate</td>
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<tr>
<td>Radiography thoracic and lumbar spine</td>
<td>May Be Appropriate</td>
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<tr>
<td>CT myelography thoracic and lumbar spine</td>
<td>Usually Not Appropriate</td>
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Thoracic and lumbar spine CT reconstructions can be concurrently obtained from CT imaging of the chest, abdomen and pelvis in trauma patients imaged for soft tissue injuries without the need for additional radiation exposure. CT head and cervical spine examinations were also obtained in this patient and revealed no acute abnormalities.
Findings: (labeled)

- Splenomegaly with numerous hypodense lesions
- No visceral or spinal injury was found. Incidentally noted is minimal ascites.
Follow-up Imaging (unlabeled)

MRI Axial HASTE

MRI Axial T1 fat sat post contrast

MRI Coronal HASTE
Follow-up Imaging (labeled)

Splenomegaly with innumerable T2 hyperintense non-enhancing circumscribed lesions, some with fluid/fluid levels.
Final Dx:

Splenic Peliosis
Case Discussion

• Peliosis
  • Rare benign disorder defined by blood-filled cysts within solid viscera
  • Most commonly found in the liver. This disorder is rare in the spleen. It can also be found in the kidneys, bone marrow and lungs.
  • When peliosis is isolated to the spleen, the patient normally has no symptoms at presentation
  • May be associated with:
    • Concurrent malignancy
    • Anabolic steroids, OCPs
    • HIV
    • TB
    • Aplastic anemia
Case Discussion

• Radiologic differential diagnosis:
  • Hemangiomatosis
  • Lymphangioma
  • Angiosarcoma
Case Discussion

• Percutaneous aspiration of peliosis demonstrates black blood and no pus.
  • Peliosis is derived from the Greek word peliosis, meaning dusky or purple in color.

• Complications:
  • Spontaneous or traumatic rupture leading to hemoperitoneum
  • If liver is involved, the patient can develop jaundice and eventual liver failure

• Definitive diagnosis and treatment can be achieved with splenectomy
References:

