53M LUQ pain and vomiting

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Acute Splenic Infarct
Wedge shaped low attenuation
Imaging Findings

• **Acute:**
  – Diagnosis best made on *portal venous phase* images
    • Do NOT confuse normal striated enhancement pattern on arterial phase CECT for splenic infarct
  – **Global infarction:** Complete nonenhancement of spleen
    • ± cortical rim sign: Preserved enhancement of peripheral rim of spleen in massive infarction = preserved flow from capsular vessels
  – **Segmental infarction:** Wedge-shaped or rounded low-attenuation area
    • Usually periphery of spleen
    • Usually straight margins
  – Can be multiple, especially when caused by emboli

• **Chronic:**
  – Scarring and volume loss
  – Multiple repetitive infarcts in sickle cell disease can lead to small, calcified spleen (autoinfarcted spleen)
  – Infarct can develop into splenic cyst
Splenic Infarct

• Complications (< 20% of patients):
  – Perisplenic fluid/hematoma suggests splenic rupture (often with large/global infarct)
  – Development of rim-enhancing fluid collection: Splenic abscess

• Associated findings: other infarcts (kidney/bowel)
Splenic infarction

• Presentation: 1/3 asymptomatic (when small), LUQ pain, fever, chills, malaise, nausea, vomiting
• 2-84yo, M=F
• Etiology:
  – Hematologic (Young): Sickle Cell, myelofibrosis, leukemia
  – Embolic (Old): septic emboli, cardiac emboli, atherosclerotic plaque emboli
• Rx:
  – Asymptomatic: pain control
  – Symptomatic/complications: splenectomy/drainage for abscess
References

1. Statdx