AMSER Case of the Month
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Epigastric Pain

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Patient Presentation

❖ **HPI:** 58 yo F presented with epigastric pain radiating to chest and upper back for 5 days. No nausea, vomiting. No history of gallstones or alcohol use disorder

❖ **PMH:** Atrial fibrillation, CAD, COPD, Depression, Hepatitis A, sick sinus syndrome, arthritis, hyperlipidemia, migraines, myocardial infarction

❖ **PSH:** Appendectomy, total abdominal hysterectomy, back surgery, knee surgery, pacemaker placement and coronary angiography

❖ **Social History:** 15 pack year smoking history. Reports current alcohol use. No drug use

❖ **Medications:** Atorvastatin, Metoprolol, Aspirin

❖ **Vitals:** BP: 151/80mmHg; HR: 67; Temp: 36.2C; RR 18; SpO2: 98%

❖ **PE:** epigastric and LUQ tenderness to palpation
Pertinent Labs

- Lipase elevated at 232
- Troponin <6, BNP normal
- LFTs, bilirubin, CBC and BMP are within normal limits
What is the appropriate imaging?

**Variant 2:** Suspected acute pancreatitis. Initial presentation with atypical signs and symptoms; including equivocal amylase and lipase values (possibly confounded by acute kidney injury or chronic kidney disease) and when diagnoses other than pancreatitis may be possible (bowel perforation, bowel ischemia, etc). Initial imaging.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>Relative Radiation Level</th>
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<tbody>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>Usually Appropriate</td>
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<tr>
<td>MRI abdomen without and with IV contrast with MRCP</td>
<td>Usually Appropriate</td>
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<tr>
<td>CT abdomen and pelvis without IV contrast</td>
<td>May Be Appropriate</td>
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<td>US abdomen</td>
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<td>US duplex Doppler abdomen</td>
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<tr>
<td>CT abdomen and pelvis without and with IV contrast</td>
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This imaging modality was ordered by the ER physician.
Findings (unlabeled)
Hypoenhancing 2.6 cm mass in pancreatic head without main pancreatic duct or bile duct dilation. MRI recommended for further evaluation.
Peripherally enhancing, centrally T2 hyperintense mass in pancreatic head may reflect walled off necrosis in the setting of pancreatitis although malignancy needs to be excluded. EUS may be helpful.

T2 hyperintense masses in the inferior right hepatic lobe and liver dome peripherally showed no enhancement, are sub cm in size, representing small cysts. No suspicious liver masses were seen.
Discussion: Pt follow up

- EUS:
- FNA of pancreatic head was performed.
- Cytology results: Positive for malignant cells.
Final Diagnosis:
Pancreatic adenocarcinoma
Discussion: Pt follow up

- Pt continued to be hospitalized for multiple episodes of abdominal pain and pancreatitis.
- Pt was to start chemotherapy but it was delayed when the patient had recurrent episodes of pancreatitis and most recently had a CT abdomen/pelvis which showed peripancreatic fluid with findings concerning for infection; patient is currently hospitalized.
- Repeat MRI, performed 2 months after initial MRI, showed new intrahepatic and extrahepatic biliary ductal dilation with tapering of CBD at the level of pancreatic mass and at least 7 hepatic metastases (see images on the next slide).
- Pt had a CBD stent placed for obstructive symptoms secondary to pancreatic adenocarcinoma.
New intrahepatic and extrahepatic biliary ductal dilation with tapering of CBD at the level of pancreatic mass
New foci of restricted diffusion within the liver parenchyma with corresponding hypoenhancement on postcontrast imaging, compatible with metastases.
Discussion: Pt presentation, treatment and prognosis

- Pt presented with LUQ and Epigastric pain
  - Common symptoms are weight loss, jaundice and pain\(^1\)
  - Serum bilirubin and alkaline phosphate might suggest pancreatic cancer, but they are not diagnostic. CA-19-9 may help with prognosis\(^2\)
- Imaging modalities for diagnosis and management as shown\(^3\)
Discussion: continued

- **Treatment**: surgical resection is the only curative treatment. For this patient, given metastatic disease to the liver, she is not a candidate for resection and will continue with chemotherapy.

- **Prognosis**: This patient has distant metastases to the liver giving her a 3% 5 year relative survival rate.⁴
References


