Case Study: Gallbladder Carcinoma

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Patient:

- Male
- 85 YOA
- Caucasian

Indication:

- Elevated Alkaline Phosphatase
History

• Annual physical showed elevated alkaline phosphatase
• Patient stated that he felt fine and denied having pain, N & V, or any other symptoms
• No personal or family history of biliary stones
Complete Abdominal Ultrasound was performed
Interpretation:

- **Liver:** normal size and echotexture
- **Gallbladder:** Normal gallbladder not identified. 4 x 4 cm fairly well circumscribed mass-like focus in GB fossa. Periphery of mass is heterogeneous with intermediate echotexture, small central area with low echotexture. No calcification.
Mass demonstrates internal vascularity and blood flow with Doppler imaging.

- CBD: 6.7 mm, no stones seen
- MPV: patent with normal flow
- Pancreas: not visualized due to bowel gas
- Spleen: 7.3 cm, normal appearing
- IVC and Aorta are normal appearing
- No peritoneal fluid seen
Conclusion:

- Abnormal mass-like focus located in gallbladder fossa. No normal appearing gallbladder identified. Findings are worrisome for possible gallbladder carcinoma. A contrast enhance CT of the abdomen should be performed.
- Mildly dilated CBD
Contrast Enhanced CT of the Abdomen was performed one week later.
Conclusion:

• 5 cm mass found in the fundus of the gallbladder. Possibly malignant. Although the gallbladder comes in contact with the hepatic parenchyma at the gallbladder fossa, there is no invasion identified.

• Mildly enlarged lymph nodes in the aortocaval space, not definitely malignant.
Common Clinical Symptoms and Presentation of Gallbladder Carcinoma
• Many patients are asymptomatic
• Early on symptoms are non-specific, usually mimicking benign gallbladder disease.
• As disease progresses patients may present with N&V, weight loss, anorexia, RUQ pain, hepatomegaly, and jaundice

(Henningson & Kuntz, 2014)
Key Statistics About Gallbladder Cancer
• Almost 6,000 new cases diagnosed every year
• 90% of GB cancers are adenocarcinomas
• 6% of GB cancers are papillary adenocarcinomas. Best prognosis because they do not spread.
• 4% adenosquamous carcinomas, squamous cell carcinomas, small cell carcinomas, and sarcomas.

(Cancer Facts and Figures, 2014)
Risk Factors
• Older age
• Female (7 out of 10)
• Family HX
• Smoking
• Chemical exposure
• Prior history of biliary disease (GB stones, chronic cholecystitis, porcelain GB, choledochal cysts, primary sclerosing cholangitis, & GB polyps)
• Diabetes
• Obesity

(Cancer Facts & Figures, 2014)
Sonographic Findings
• Inhomogeneous, polypoid lesion with irregular margins
• Localized wall thickening
• Mass that replaces gallbladder
• Calcification of gallbladder wall
• Polyps larger than 10 mm suspicious for malignancy
• Metastatic lesions in the liver
• Ascites
• Intraductal biliary dilation
• Internal blood flow

(Henningson, 2014)
It is impossible to diagnose gallbladder carcinoma with ultrasound alone. GB carcinomas have the same sonographic appearance and symptoms as other diseases of the gallbladder.

Let’s see if you can determine what is cancer and what is not…
(Abdomen and retroperitoneum, n.d.)
This was believed to be a gallbladder carcinoma infiltrating the liver. Actual diagnosis cholecystitis.
Described as cholecystitis, large stone, and sludge. Actual diagnosis: gallbladder carcinoma with invasion of bile ducts.

(Abdomen and retroperitoneum, n.d.)
(Abdomen and retroperitoneum, n.d.)
Adenocarcinoma of the GB mistaken for polyps, cholecystitis, and stones.

(Abdomen and retroperitoneum, n.d.)
(Abdomen and retroperitoneum, n.d.)
Cholecystitis with gallstones mimicking gallbladder carcinoma.
