

Introduction

Gastrointestinal Stromal Tumors (GISTs) are subepithelial neoplasms characterized by the expression of KIT protein (CD117 antigen). They are the most common non-epithelial neoplasms of the GI tract, often found in the stomach and distal small intestine, with small GISTs often undiagnosed. GISTs have malignant potential, but nodal involvement is rare, explaining why surgical resection is usually first line treatment. Adjuvant treatment following resection or neoadjuvant treatment in the setting of unresectable/metastatic GISTs may produce an improved median survival. We present a patient with painful jaundice found to have GIST.

Case Presentation

A 70-year-old man with a history of lung cancer, coronary artery disease, and nephrolithiasis presented with waxing and waning diffuse abdominal pain occasionally radiating to the back for three weeks. Associated symptoms included increased eructation, decreased appetite, generalized weakness, steatorrhea, rust-colored urine, and jaundice. The pain worsened with fatty meals and improved with defecation.

The patient appeared jaundiced with conjunctival icterus. Abdomen was soft, non-distended with right upper quadrant tenderness, voluntary guarding and hypoactive bowel sounds. Labs revealed a cholestatic pattern of liver enzymes indicating obstruction. Of note, the CA 19-9 level was 142.

Biliary imaging was performed (Figure 1), which showed peripancreatic mass and severe biliary stricture in the lower third of main bile duct (Figure 1B). Pathology results of fine needle biopsy indicated low-grade spindle cell neoplasm consistent with GIST, CD117, CD34 and smooth muscle actin positive, S-100 and desmin negative. Given the location of the tumor, elective robotic pancreaticoduodenectomy was performed two months later with nodal resection.

Imaging



Figure 1: Biliary Imaging.

Figure 1A: RUQ abdominal ultrasound demonstrating hydropic gallbladder 11.5 cm in length with sludge.

Figure 1B: ERCP fluoroscopy showing evidence of biliary duct stricture.



Figure 2: Axial and coronal views of abdominal CT scan

Discussion

Historically, the presentation of painful jaundice is associated with extrahepatic cholestasis including intrinsic and extrinsic tumors eg.

- Cholangiocarcinoma
- Pancreatic cancer
- Choledocholithiasis
- Primary sclerosing cholangitis
- Acute pancreatitis
- Sphincter of Oddi dysfunction
- Biliary tract strictures following invasive procedures

The unusual location of this patient's GIST led to differential diagnoses that did not include his ultimate diagnosis.

Conclusion

This case report highlights the presentation of an often undiagnosed cancer, GIST, especially given its unique location in the GI tract.

It is vital that as clinicians we keep a broad differential while performing workups of abdominal pain with jaundice.

References

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