#### Rare case of recurrent liver abscess caused by Choledocodoudenal fistula in ampullary diverticulum



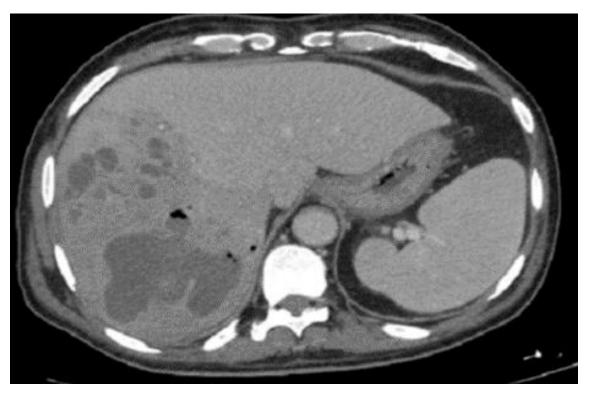
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## Introduction:

- Choledocodoudenal Fistula is a rare condition that may be caused by Choledocholithiasis, surgical or laparoscopic cholecystectomy, duodenal ulcer and tumor invasion.
- Choledocodoudenal fistula has no specific symptoms and may be accidentally discovered during upper GI endoscopy; but in some cases, it may lead to recurrent cholangitis and liver abscess.

## Labs/Imaging:

**Imaging:** Computed tomography of the abdomen showed Large heterogeneous mass occupying VIII, VII and V segments



## **Case presentation:**

- > Age/Sex: 68 year old male.
- > Medical history: Hypertension, Type II DM, COPD and CAD.
- > **Presentation:** he was referred from outside facility for evaluation of Liver abscess. He was admitted there for sepsis, required IV antibiotics. Blood culture grew E. Coli
- Upon admission he complained of abdominal pain, but denied any fever, chills, weight loss, loss of appetite or change in bowel habits.
- > Vitals: He was afebrile, BP at 125/60mmhg, heart rate at 73, saturating 96% on room air.
- > Physical exam: The patient has soft abdomen with mild RUQ tenderness with Hepatomegaly (3 fingers below the costal

No fimalgingmeter inestration was unremarkable

# **ERCP**:

• ERCP showed:-Ampulla in a large diverticulum. -Biliary fistula at the apex of diverticulum.-Good drainage for contrast through the fistula.



### Management:

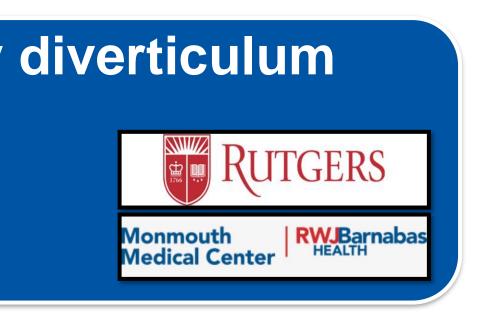
- Patient was started on IV Antibiotics and Pain Medications.
- > As ERCP showed: Tiny Ampullary orifice in large diverticulum. The injection of the contrast revealed a fistula at the apex of diverticulum with good drainage through it, so Endoscopic sphincterotomy was not performed.
- Interventional radiology (IR) was consulted and CT-guided Drainage of the Liver abscess was done.

#### **References:**

- 1) Bile Duct Injuries and Fistulas; doi.org/10.1016/B0-12-386860-2/00067-8
- 2) Endoscopic sphincterotomy of the ampulla of Vater. Gastrointest Endosc. 1974;20(4):148-51.
- 3) Intrahepatic pyogenic abscesses: Treatment by percutaneous drainage. Amer J Surg. (1985); 149:487-494.

## **Discussion:**

- patients



> Choledocodoudenal fistula is a rare complication of the cholelithiasis which occurs in between 0.3% and 0.4% of

➢ More than 90% of internal biliary fistulas occur as a result of cholelithiasis and acute or chronic cholecystitis.

> With more widespread use of laparoscopic cholecystectomy, the incidence of bile duct injury, including biliary fistulas, has increased (compared to the incidence associated with open cholecystectomy).

Choledocodoudenal fistulas (CDF) are usually diagnosed incidentally on radiography (ERCP or MRCP

 $\succ$  The treatment of biliary fistula depends on the underlying cause. In case of the biliary stones sphincterotomy followed by balloon dilation has provided the best outcomes.

> The best modality to treat liver abscess is the combination of broad-spectrum antibiotics and percutaneous drainage.