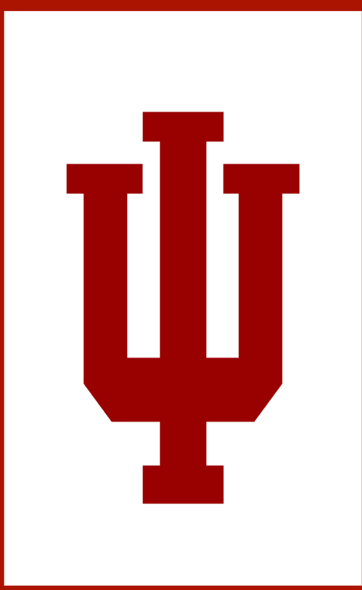

An Unusual Case of Acute Liver Failure Secondary to Autoimmune Hepatitis (AIH) from Drug-Induced Liver Injury (DILI)

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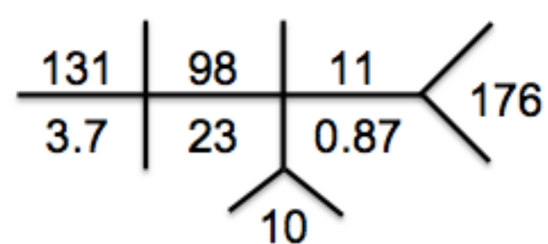
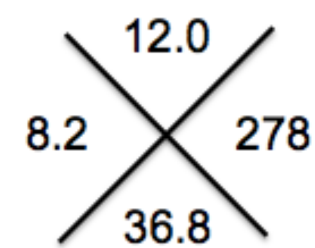
Learning Objective

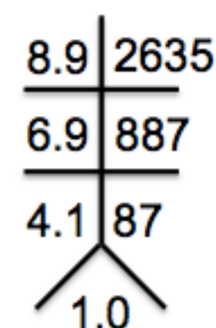
A broad differential diagnosis and detailed workup is necessary in the evaluation of acute liver failure

Case Description:

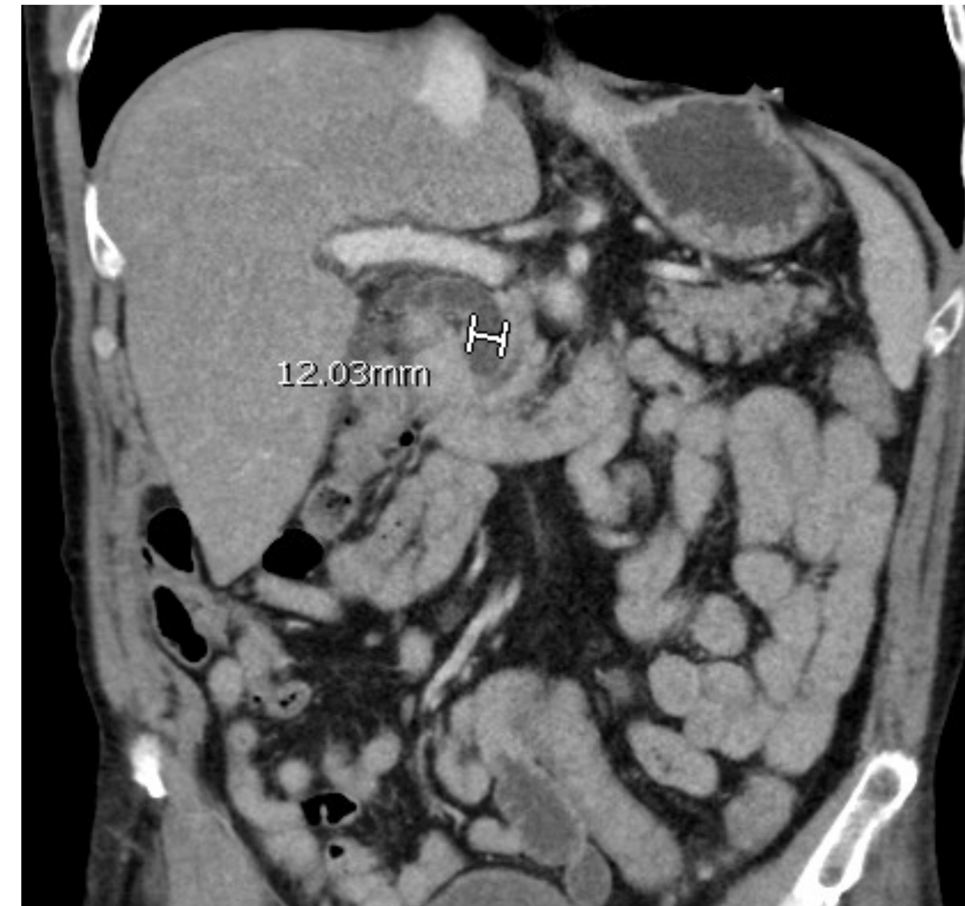
- A 68 year old white man presents with several weeks of worsening RLQ pain, for which he has been taking up to 20 tablets of naproxen daily
- **ROS:** + diffuse pruritis
- **PMHx:** COPD, Inguinal Hernia repair, Knee OA, CCY
- **Medications:** Albuterol inhaler, Naproxen, recent 10 day course of Cephalexin
- **SocHx:** Daily tobacco use; minimal EtOH
- **PE:** + diffuse excoriation and RUQ/RLQ tenderness
- **Initial Labs:**





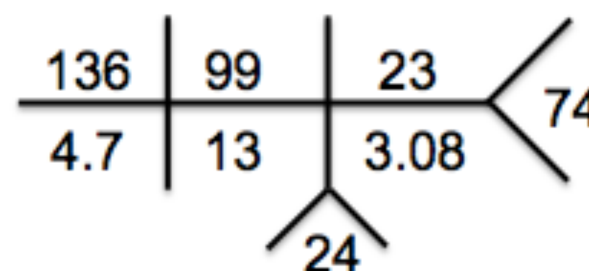


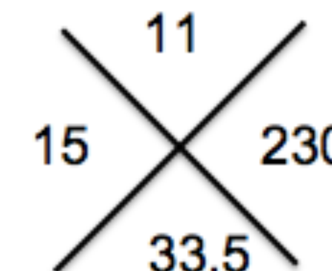
Dbili= 0.5
UDS + Opiates
Serum Acetaminophen: 25
Serum Ethanol: <10

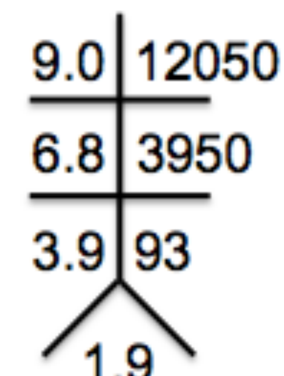


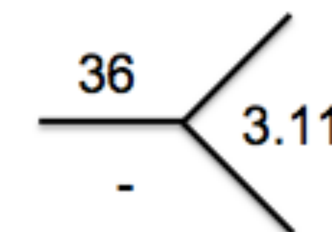
CT AP w/IV Contrast showing L intrahepatic biliary dilatation, also seen on RUQ Ultrasound

- Labs 24 hours after presentation obtained in the setting of acute encephalopathy:









- Negative infectious workup, including blood cultures, Hepatitis, EBV & CMV serologies
- Tumor markers (CEA, CA 19-9, AFP) were bland and serum Ceruloplasmin was normal

- Immunologic workup: Smooth muscle antibody weakly positive (1:20 titer). ANA, AMA & LKM1 IgG negative. Serum IgG normal.
- ERCP revealed a severe left intrahepatic biliary stricture with resulting stent placement into the left hepatic duct. Bile duct brushing was negative for atypical cells.
- Liver biopsy demonstrated centrilobular necrosis and parenchymal collapse with focal bridging necrosis and mixed inflammatory infiltrate.
- A diagnosis of AIH secondary to DILI leading to acute liver failure was made, with either Naproxen or Cephalexin being the inciting drugs.

Discussion:

- Patient was started on a prednisone taper with marked improvement prior to discharge. Labs one month after discharge revealed complete resolution of his kidney and liver injury.
- This case illustrates a rare clinical entity as neither Naproxen nor Cephalexin are classically associated with causing AIH or acute liver failure.

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