

Case 9 (March 23 2006): [N Engl J Med 2006;354:1295-303.](#)

Case 9-2006 — A 35-Year-Old Woman with Recurrent Right-Upper-Quadrant Pain

Demographic: 35 Year Old, Female, Not pregnant, America North, General speciality

Clinical features extracted from the case and entered into the query box:

One Month before admission:

Recurrent abdominal pain in right upper quadrant
Abnormal liver function tests
Hepatitis C positive
Abdomen ultrasound showed biliary dilatation
Large stones in the common bile duct and left hepatic duct
Jaundice

Admission:

Recurrent "right upper quadrant" "abdominal pain"
Abnormal liver function tests
Hepatitis C positive
Abdomen ultrasound showed biliary dilatation
Large stones in common bile duct and left hepatic duct
Jaundice
Nausea
Constipation
Chills
Fever
Leukocytosis

Synonyms used by Isabel (optional) for the above query:

Admission:

RUQ
Abdominal pain
Fever
Abnormal liver function tests
Leukocytosis

STOP !

Before you read further you might want to construct your own:

- Complete differential diagnosis
- Final diagnosis

In the following section you will find:

- The differential diagnosis constructed by the MGH panel
- The final diagnosis of the case
- Which of the MGH panel differential diagnoses did Isabel contain
- Did Isabel suggest the Final diagnosis

Differential Diagnoses considered by the MGH panel:

Recurrent Pyogenic Cholangitis
Salmonella associated cholelithiasis
HIV Infection
Cholangiocarcinoma
Biliary flukes – Clonorchis and Opisthorchis
Ascariasis

Final Diagnosis of the case according to NEJM:

Recurrent pyogenic cholangitis with biliary helminthic infection.

Differential Diagnoses of the case as given by Isabel:

Admission:

Cholangitis – Isabel 1st page
Cholelithiasis – Isabel 1st page
Cholangiocarcinoma – Isabel 1st page
Ascariasis – hepatobiliary – Isabel 1st page
HIV related Gallbladder disease – Isabel 2nd page & on clicking on specialty heading
Fluke Infection – Fascioliasis – Isabel 2nd page & on clicking on specialty heading

Was the final diagnosis given by Isabel?

Admission:

Yes, Cholangitis (Isabel 1st page) & Ascariasis (Isabel 1st page)

Entire presentation cut and pasted into the Isabel query box:

Cholangitis – Isabel 1st page

Fluke Infection – Fascioliasis – Isabel 3rd page & on clicking on specialty heading

Isabel Differential:

GASTROINTESTINAL DISORDERS	
↳ Cholangitis	<input checked="" type="checkbox"/>
↳ Cholecystitis	<input type="checkbox"/>
↳ Cholelithiasis	<input type="checkbox"/>
Obstructive Jaundice	<input type="checkbox"/>
Choledochal Cysts	<input type="checkbox"/>
Liver Abscess	<input type="checkbox"/>
↳ Pancreatitis	<input type="checkbox"/>
Hepatocellular Failure	<input type="checkbox"/>
Inflammatory Bowel Disease	<input type="checkbox"/>
Alpha-1-Antitrypsin Deficiency	<input type="checkbox"/>
Biliary Obstruction and Injury	<input type="checkbox"/>
↳ Cholestasis	<input type="checkbox"/>
Alcoholic Liver Disease	<input type="checkbox"/>
Biliary Fistula	<input type="checkbox"/>
Benign Neoplasms of the Biliary Tract	<input type="checkbox"/>
Postinflammatory Biliary Stricture	<input type="checkbox"/>
HIV-Related Gallbladder Disease	<input type="checkbox"/>
Postcholecystectomy Syndrome	<input type="checkbox"/>
Drug Induced Liver Disease	<input type="checkbox"/>

NEOPLASTIC DISEASES	
↳ Liver Neoplasms	<input type="checkbox"/>

INFECTIOUS DISEASES	
↳ Ascariasis	<input checked="" type="checkbox"/>
Clostridial Infections	<input type="checkbox"/>
Brucellosis	<input type="checkbox"/>
EBV Infection	<input type="checkbox"/>
Herpes Simplex Virus Infection	<input type="checkbox"/>
↳ Salmonella Infections	<input type="checkbox"/>
↳ Fluke Infection	<input type="checkbox"/>
Hydatid Cyst	<input type="checkbox"/>

RHEUMATIC DISEASES	
Osteomyelitis and Septic Arthritis	<input type="checkbox"/>

TOXICOLOGY	
↳ Drug Overdose/Poisoning	<input type="checkbox"/>