

LIVER DISEASES




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You see a 18-day-old male infant for his 2-week visit. He is breastfeeding well, and his weight gain has been appropriate. Mom reports that he still looks a little jaundiced but she says that his color seems to be improving. His physical exam is unremarkable except for mild jaundice and scleral icterus.


Are there any “red flags” to suggest cholestasis?

What is the most likely cause for his jaundice?

Are there any tests that should be ordered?

How will you manage this patient?





You see a 4-week-old male infant in clinic. He is breastfeeding well, and his weight gain has been appropriate. Mom reports that his stools are almost white in color and his urine very dark brown. On physical exam, he has mild jaundice and scleral icterus and his liver is palpable 3 cm below the costal margin.

Are there any “red flags” to suggest cholestasis?

What is the most likely cause for his jaundice?

Are there any tests that should be ordered?

How will you manage this patient?



You see a 14-year-old female in clinic for fever, nausea and vomiting for the past 3 days. She reports that this morning she noticed a yellow color to her eyes and skin. Her physical exam is remarkable for jaundice, scleral icterus, and mild right upper quadrant tenderness. Labs: ALT 4000, AST 3100, alk phos 280, total bili 7.8, conj bili 5.6.

- What is your assessment of this patient?
- What is the most likely etiology?
- What other labs would you order?
 - Hep A IgM (+)
 - Coags normal, ammonia normal
- How would you treat this patient?
- What if the Hep A IgM was (-)?

You see a 9-year-old female with jaundice. She was seen in a local ER and was told that she had hepatitis. Family history is positive for hypothyroidism in the maternal grandmother and the mother. PE: normal except jaundice. Labs from local ER: ALT 2300, AST 2200, alk phos 300, total bili 12.2, conj bili 8.8, hepatitis screen (-).

- What is your assessment of this patient?
- Are there any clues to suggest an etiology?
- What other labs would you order?
 - EBV and CMV serologies (-)
 - IgG elevated, ANA (+), anti-SMA (+)
- What is your diagnosis of this patient?
- How would you manage this patient?

Autoimmune Hepatitis


- More common in females
- Personal or family history often positive for autoimmune diseases
- Lab:
 - ANA, anti-SMA: Type I
 - Anti-LKM₁: Type II
 - Elevated IgG: either
- Treatment: steroids +/- azathioprine

You see a 15-year-old male patient in clinic with fever. On physical exam you notice that he has mild scleral icterus. He states that he often notices this whenever he is sick and states that the same thing happens to his father and uncle. PE: no abdominal tenderness, no HSM. Lab: ALT, AST, alk phos normal; total bili 4.8, conj bili 0.2

- What is your assessment of this patient?
- What is the most likely etiology?
- Are there any other labs that you would order?
 - Consider labs to rule out hemolysis
- How would you treat this patient?



Gilbert's Disease

- Jaundice seen in times of illness or decreased po intake
 - Autosomal dominant
 - Bilirubin is UNconjugated
 - Other liver labs are normal
 - No signs of chronic liver disease
 - No treatment is necessary
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You see a 17-year-old male who presents with jaundice. Mom reports that he has become very withdrawn over the past year and has recently been diagnosed with depression. PE: liver edge palpable 6 cm below costal margin and 8 cm below midline, faint brown rings noted at edge of iris.

- What is your assessment of this patient?
- Are there any clues to suggest an etiology?
- What other labs would you order?
 - Ceruloplasmin **decreased**
 - 24-hour urine copper extremely **elevated**
- What is your diagnosis of this patient?
- How would you manage this patient?

Wilson's Disease

- Liver disease, CNS disease, psychiatric disease, signs of hemolysis
- Usually affects older children or adolescents
- Kayser-Fleischer rings highly suggestive
- Lab:
 - Decrease serum ceruloplasmin
 - Elevated 24-hour urine copper
- Treatment: penicillamine or trientine +/- zinc


You see a 13-year-old male in clinic for a yearly check-up. He is asymptomatic today. PE: severely obese, acanthosis nigricans present, liver palpable 3 cm below costal margin. Labs: ALT 180, AST 110, alk phos 200, bili 0.8

- What is your assessment of this patient?
- Are there any clues to suggest an etiology?
- What other labs would you order?
 - Fasting blood glucose and insulin level elevated
 - Hepatitis panel (-)
- What is your diagnosis of this patient?
- How would you manage this patient?



NASH

Non Alcoholic Steato Hepatitis

- Most common liver disease in the U.S.
 - Obesity and insulin resistance
 - Fatty infiltration of liver with inflammation
 - Must rule out other causes
 - Treatment: weight loss is first line treatment
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A 15-year-old female presents with vomiting and mental status changes. Her friends report that she took a large amount of Tylenol 3 days ago because of a fight with her family. PE: confused, combative, somewhat somnolent; moderate right upper quadrant tenderness. Lab: ALT 18000, AST 15500, bili 2.8, albumin 3.4

- What is your assessment of this patient?
- What other labs would you order?
 - PT 19.6, INR 2.1
 - Ammonia 120
 - Acetaminophen level <10
- How would you manage this patient?

THE END