A Man from Guatemala With Abdominal Pain, Jaundice, and Acute Liver Failure

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A 49-year-old man presented to an outside hospital with an 8-day history of right upper quadrant abdominal pain, chills, and jaundice. He denied fever, nausea, vomiting, and diarrhea. Liver enzymes markedly elevated. Started on N-acetylcysteine for possible acetaminophen poisoning with no improvement. Transferred to our institution for further management of acute liver failure.

Past medical history included hypertension, genital HSV, history of syphilis 1993 (treated with 3 doses of an antibiotic). Born in Guatemala, arrived to the United States in the 1990s. History of unprotected sex with prostitutes. Denies tobacco, alcohol, or illicit drugs. No recent travel.

On exam, afebrile, grossly jaundiced with scleral icterus. Abdomen was soft, nontender, without hepatosplenomegaly. No rash, skin or oral lesions. Remainder of exam was normal.

WBC count, hemoglobin, platelet count, creatinine and electrolytes were normal. AST 1397 U/L, ALT 1700 U/L, ALP 142 U/L, total bilirubin 22.3 mg/dL, gamma-glutamyl transferase 275 U/L. Acute hepatitis panel, HIV test, toxicology was negative. Work up for autoimmune disease, metabolic disease, cancer and viruses were all negative. Quantiferon TB was negative. Strongyloides IgG antibody was negative. FTA-ABS reactive, RPR 1:2. Imaging was normal.

Patient was treated for late latent syphilis with 3 weekly doses of benzathine penicillin 2.4 million units.

Patient underwent liver biopsy which revealed severe acute hepatitis. Immunostaining for adenovirus, HSV I and II, and CMV were negative. An immunostain for spirochetes was positive.

After the second penicillin dose liver enzymes improved, AST 189 U/L, ALT 185 U/L, ALP 100 U/L, and total bilirubin 10.1 U/L. Patient was discharged home, and received a third dose of benzathine penicillin as an outpatient.

Syphilitic hepatitis is an uncommon manifestation of secondary syphilis that responds to conventional treatment with penicillin. In absence of cutaneous and genital lesions, and poor history, diagnosis can be difficult. This case emphasizes the importance of thorough medical and sexual history in patients with undiagnosed hepatic disease.
Figure 1. Liver biopsy, H and E stain 40X
Figure 2. Immunostain for spirochetes, liver tissue, with red arrows pointing to spirochetes. Liver biopsy shows severe acute hepatitis with portal, periportal and lobular mixed inflammatory infiltrate.

Figure 3. Immunostain for spirochetes, liver tissue.