You are consulted on a 20-year-old obese female patient who was admitted initially to the Psychiatry ward due to disinhibition and severe anxiety but then was transferred to the ICU service after developing encephalopathy followed by hypoxic respiratory failure. Here initial bloodwork showed the following: Hemoglobin 10 g/dL, creatinine 1.8mg/dL, Total bilirubin 1.1mg/dL, ALT 40 IU/L, AST 90 IU/L, Alkaline phosphatase 16 U/L, INR 2.0. Right upper quadrant ultrasound shows hepatomegaly with mild coarsening of the liver parenchyma, portal vein with normal direction of flow, and common bile duct 4mm in size. In reviewing your differential diagnoses for this patient, what is the most likely etiology for her presentation?

A. Fatty liver  
B. Ischemic hepatopathy  
C. Wilson’s disease  
D. Acute hepatitis B  
E. Portal vein thrombosis

Answer: C

Wilson’s disease is the only condition listed that has a very low alkaline phosphatase, along with neuropsychiatric symptoms. There was mild evidence of coarsening on the liver ultrasound, but fatty liver without fibrosis does not typically present with acute elevations of INR or a low alkaline phosphatase level. Acute hepatitis B and ischemic hepatopathy typically present with ALT/AST much higher than those listed and sometimes in the thousands. The normal direction of flow of the portal vein on ultrasound suggests against portal vein thrombosis.