

Question 31 – April 4

A 55 year old man received a cadaveric liver transplant for cirrhosis secondary to hepatitis C with an uncomplicated post-transplant course. At 1 year after transplantation, he has normal allograft function on tacrolimus monotherapy. Other medications are amlodipine for hypertension and ezetimibe for hypercholesterolemia. At 18 months, he is asymptomatic and has no new medications. Laboratory testing shows the following: AST 124 U/L, ALT 210 U/L, Alkaline Phosphatase 120, bilirubin 1.0 mg/dL, and the tacrolimus level is 6.2 (stable level for this patient). Ultrasonographic findings are normal.

The most likely diagnosis is:

- A. Acute cellular rejection
- B. Recurrent hepatitis C
- C. Cytomegalovirus infection
- D. Biliary disease
- E. Drug hepatotoxicity

Answer: B

In an asymptomatic patient now > 1 year from liver transplantation with no history of rejection or biliary complications and normal allograft function receiving stable immunosuppressant medications, recurrent liver disease is the most likely possibility, especially in a patient with hepatitis C. Rejection is unlikely in a patient with stable immunosuppressant levels with no medication changes. Cytomegalovirus infection tends to occur within 1 to 6 months after transplantation and generally produces symptoms. Biliary disease is a consideration but usually does not produce this degree of increase in aminotransferase levels. Although drug-induced liver injury is a consideration, in large randomized controlled trials ezetimibe by itself has not been associated with a higher rate of transaminase elevation than that which occurs with placebo therapy. However, the addition of ezetimibe to statin therapy has been associated with a slight increase in the likelihood of serum aminotransferase elevations.

References:

Firpi RJ et al. The natural history of hepatitis C cirrhosis after liver transplantation. *Liver Transplantation*. 2009 Sep;15(9):1063-71

<http://livertox.nih.gov/Ezetimibe.htm>. Accessed November 25, 2014.