

Question 11 - October 10

A 58 year old male with new ascites goes for a transjugular liver biopsy with portal pressure measurements. The portal pressure gradient is measured to be 14. All the following are possible etiologies for the portal hypertension **EXCEPT**?

- A. Acute alcoholic hepatitis
- B. Hepatitis C cirrhosis
- C. Portal vein thrombus
- D. Polycystic liver disease
- E. Amyloidosis of the liver

Answer: C

The portal pressure gradient is defined as the difference between the wedged hepatic venous pressure and the free hepatic venous pressure. In healthy adults, values are normally between 1-5 mmHg, whereas clinically significant portal hypertension is defined as greater than or equal to 10 mmHg. Intrahepatic causes of portal hypertension, such as acute alcoholic hepatitis, hepatitis C cirrhosis, polycystic liver disease, and amyloidosis of the liver, would all cause an elevated wedged hepatic venous pressure and a normal free hepatic venous pressure. Thus, all of these etiologies would be expected to have an elevated portal pressure gradient. However, a pre-sinusoidal cause of portal pressure such as a portal vein thrombus should have a normal wedged hepatic venous pressure and a normal free hepatic venous pressure; thus, there should not be an elevated portal pressure gradient. Please see Box 2 in the link below.

Reference:

<http://www.nature.com/nrgastro/journal/v6/n10/full/nrgastro.2009.149.html>