



PIC QUESTION OF THE WEEK: 6/01/09

Q: Can *statins* be used in patients diagnosed with hepatitis C virus infection?

A: The hepatitis C virus (HCV) primarily affects the liver resulting in fibrosis and chronic disease that potentially can lead to cirrhosis and liver failure. According to the Centers for Disease Control and Prevention (CDC), nearly 3.2 million people in the United States have the disease while approximately 19,000 new cases are reported each year. The *statins* (HMG-CoA reductase inhibitors) are routinely used to treat hypercholesterolemia and combined dyslipidemias as well as for the prevention of stroke and myocardial infarction. These medications are extensively metabolized by the liver and may not only raise transaminase values, but also result in cholestasis, jaundice, necrosis, and hepatic failure. Because of this association, statins have generally been considered contraindicated in patients with active liver disease. There are, however, a number of trials whose results suggest this group of drugs is safe and effective in patients with hepatitis C or nonalcoholic fatty liver disease. A study published in 2006 evaluated the incidence of statin hepatotoxicity in patients with hyperlipidemia and hepatitis C. The trial involved over 800 participants and evaluated liver transaminase values in patients with HCV using a statin, individuals with HCV not on a statin, and HCV negative patients receiving a statin. There were mild to moderate increases in liver transaminases in both groups taking statins; however, the difference was not statistically significant. In addition, there was no significant difference in the number of patients with liver enzyme elevations > 3X the upper limit of normal (ULN) or the number who were required to discontinue therapy. The authors concluded that statins were effective in patients with HCV infection and not associated with a greater risk of additional hepatotoxicity. A retrospective study published in 2007 evaluated the safety and efficacy of statins (90% received simvastatin) in 146 patients seropositive for HCV. Again, statins effectively reduced LDL levels in all patients while only one had an increase in ALT values > 3X ULN. A number of smaller studies have resulted in similar conclusions. Clearly, the administration of statins to patients with HCV infection must be evaluated on an individual basis. Those whose disease is mild and stable appear to benefit from this type of therapy without experiencing significant increases in transaminase values.

References:

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