

Letter To Editor**Herbal medicine and liver disease, for any conclusion  
we need to do more studies**J Res Med Sci 2011; 16(7): 974-975

I interestedly read the published article by Kalantari et al. in your journal recently.<sup>1</sup> Hepatitis C virus (HCV) infection is one of the main causes of liver disease in Iran.<sup>2, 3</sup> The standard therapy with alpha interferon and ribavirin can eradicate the virus in about 50% of patients.<sup>4</sup> Therefore, it necessitates studying other HCV infection treatment drugs.

There are some reports about safety and efficacy of herbal medicine in chronic liver disease management.<sup>5, 6</sup> The most known herbal medicine is *Silybum marianum* (milk thistle) which is reported to be safe with no serious adverse effects.<sup>5</sup>

First of all, I would like to mention that insulin resistance has an important role in non-alcoholic fatty liver disease and HCV infection.<sup>7</sup> Considering the proposed role of oxidative stress in pathogenesis of liver disease, using antioxidants, such as silymarin, has been reported to be effective in treatment of different types of liver disease, especially nonalcoholic fatty liver disease.<sup>8-10</sup>

Some recent reports about the efficacy of intravenous silymarin in HCV infected patients<sup>11</sup> encouraged us to study oral silymarin as a cure for HCV infection. Using oral doses of silymarin is safe and well tolerated.<sup>11</sup> However, other studies did not find any response based on HCV RNA results.<sup>3, 12</sup> Finding a high response rate in Kalantari et al<sup>1</sup> - 9 out of 55 HCV RNA positive patients seroconverted to

negative without any anti-viral drugs - is very amazing and may be related to technical errors in molecular study for HCV RNA detection in the serum. A randomized, double-blind, placebo-controlled study using 1200 mg of silymarin administered once daily to patients with chronic HCV failed to produce a significant effect on either serum transaminases or quality of life measures.<sup>12</sup> Although I think intravenous formulation of the dihydrosuccinate sodium salt forms of silybin A and silybin B, the two most abundant flavonolignans in milk thistle extracts, in patients with chronic HCV may have an antiviral activity, I cannot be confident about the oral type.

On the other hand, I would like to ask the authors to declare that the enrolled patients were non-cirrhotic and HIV negative. The authors did not present any data regarding the sonography or liver biopsy findings in their patients. The main weakness of this study was open-label method used, while for any conclusions, we need a randomized, placebo-controlled, double-blind study.

Finally, they did not mention the cause of death in one patient. Adherence to the total number of doses during the study was not stated either. I hope pharmacokinetic studies would be performed to calculate the flavonolignan content of each capsule before any further study in future about *silybum marianum* effect on the liver diseases.

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**Conflict of Interests**

Author has no conflict of interests.

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