

HEPATITIS

# Cryoglobulinemia—a useful predictor of treatment response in patients with chronic HCV infection?

New research has found an association between cryoglobulinemia and sustained virological response (SVR) as well as more advanced liver disease in patients with chronic HCV infection. “This study highlights the potential role of cryoglobulinemia in predicting treatment response in patients with chronic HCV infection,” says Aline Vigani from

Universidade Estadual de Campinas, Sao Paulo, Brazil.

An estimated 170 million people worldwide are infected with HCV and chronic HCV infection is a major cause of liver disease.

Management of the disease can be difficult, points out Vidani and

“predicting treatment response is of crucial importance because it can help

clinicians decide which patients should be treated and with which regimen”.

Vigani and colleagues studied individuals with chronic HCV infection (genotypes 1–4) who were treated at their institution over a 3-year period. Of the 329 HCV-infected patients included in the study, 256 individuals were treated with interferon and ribavirin therapy and more than half of the study participants (59.6%) had cryoglobulinemia. According to multivariate analyses, cryoglobulinemia was associated with severe active necroinflammation and serum level of rheumatoid factor. Moreover, more patients with cryoglobulinemia achieved an SVR than those without and absence of cirrhosis, serum level of rheumatoid factor and cryoglobulinemia were all independently associated with SVR.

The authors believe that the high SVR rate seen in HCV-infected patients with cryoglobulinemia could be due to

a prominent T-helper-1 ( $T_H1$ ) immune response in these individuals. “Several investigators have reported that the enhancement of HCV-specific  $T_H1$ -type cell response is necessary for HCV eradication by the drugs currently used to treat HCV infection (interferon and ribavirin),” adds Vigani. The study investigators now plan to research the association of  $T_H1$  cytokine responses and cryoglobulinemia to elucidate the complex mechanisms that underlie the inflammatory and immune responses to HCV infection.

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