

REVIEW ARTICLE

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Autoimmune Diseases Co-Existing with Hepatitis C Virus Infection

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ABSTRACT

Autoimmunity and viral infections are closely associated fields, and viruses have been proposed as a likely aetiological, contributory or triggering factors of systemic autoimmune diseases. Hepatitis C virus seems to be the virus usually associated with the appearance of autoimmune diseases, and the relationship between chronic hepatitis C virus infection and some autoimmune disease has been studied. For some of these disorders their association with hepatitis C virus infection is well recognized while for others it remains probable or weak. Examples of autoimmune phenomena observed in chronic hepatitis C virus infection include rheumatoid arthritis, thyroid disease, cryoglobulinaemia, immune thrombocytopenic purpura, systemic lupus erythematosus and sjogren syndrome. To date, the etiological role and the pathogenetic involvement of the hepatitis C infection remains unknown. The aim of this study is to assess the presence of different autoimmune manifestations of hepatitis C virus infection reported in literature.

Key words: Autoimmunity; Hepatitis C Virus; Immune Mediated Disease

INTRODUCTION

Hepatitis C virus (HCV) is a member of the Flaviviridae family and associated with different autoimmune manifestations.¹ Based on different studies, 40-74% of HCV infected patients may experience other complications during the course of the disease that are principally immunological.^{2,3}

The prevalence of HCV infection is much higher among some of these conditions and suggests a

pathogenetic role of the virus. HCV is a trigger for the autoimmune reactions resulting in production of autoantibodies.^{2,3} In recent years, Cacoub et al.² found positive ANA in 41% of patients, rheumatoid factor (RF) in 38%, anticardiolipin antibodies (aCL) in 27%, and antithyroglobulin antibodies in 13% of patients. Some of these antibodies such as anti-C-reactive protein correlated with the severity of liver disease.⁴ Anti-HCV high seropositivity in chronic liver disease (CLD) patients may also point to an autoimmune processes in CLD.⁵

HCV may localize in several tissues besides the liver (including kidney, skin and salivary glands). These tissues might act as a reservoir for HCV and contribute in both persistence and reactivation of virus.⁶

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