



# HCSP FACT SHEET

HCV ADVOCATE

• EXTRAHEPATIC MANIFESTATION OF HCV •

## *Membranoproliferative Glomerulonephritis*

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### *Foreword*

The most common type of glomerulonephritis (kidney disease) found in people with hepatitis C is membranoproliferative glomerulonephritis (MPGN). Other less common forms of kidney disease include noncryoglobulinemic MPGN, membranous glomerulonephritis, MPGN type III, and mesangial proliferative glomerulonephritis. This fact sheet article will concentrate on MPGN.

MPGN is a type of kidney disease that is caused by complexes (such as HCV antibodies, hepatitis C virus, rheumatoid factor) being deposited in the membranes (glomeruli) of the kidneys. The prevalence of MPGN in the hepatitis C population is difficult to gauge because of the limited number of studies conducted, but in two studies the hepatitis C virus was detected in about 60% of patients with MPGN in Japan and 10-20% of people with MPGN in the United States.

Despite the fact that HCV-related MPGN is relatively uncommon in the hepatitis C population, MPGN is considered a significant problem because of the large number of people infected with hepatitis C and the potential for serious and life-threatening complications.

MPGN is usually diagnosed using various laboratory tests such as HCV antibody positive, HCV viral load, elevated liver enzymes, positive rheumatoid factor and circulating cryoglobulins. It can also be confirmed by kidney biopsy.

**Important note:** Everyone with hepatitis C should be evaluated and receive HCV treatment. Current treatment is very expensive, and some insurance companies and Medicaid/Medicare are restricting HCV treatment to people with the most severe HCV disease. One of the conditions that may qualify people for treatment is kidney disease. Discuss any symptoms with your medical provider and have them recorded in your medical

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The information in this fact sheet is designed to help you understand and manage HCV and is not intended as medical advice. All persons with HCV should consult a medical practitioner for diagnosis and treatment of HCV.

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records. If you are not approved for the drugs to treat hepatitis C, you may qualify for free drugs or co-pay assistance through a pharmaceutical patient assistance program. More information is available at the end of this fact sheet.

MPGN is a difficult disease to diagnose because there are few symptoms during the early stages of MPGN. The actual diagnosis of most cases occurs mostly in people who are in their 50's and 60's. It also occurs somewhat more commonly in women than in men. Symptoms can include elevated liver enzymes, hypertension (high blood pressure), joint pain and neuropathy.

The disease progression of MPGN occurs generally over a long period of time and is highly variable from one person to another. About 10% of people with MPGN will develop serious kidney disease (end stage renal disease) that will require dialysis.

Treatment of HCV-related MPGN usually consists of treatment of the underlying cause – hepatitis

C. HCV treatment has had limited success, but it has been shown to improve the condition of the kidneys, and reduce the incidence of acute flare-ups in some people. Remission of HCV-related MPGN only occurs in a minority of people treated. One of the most important strategies for managing MPGN is to control blood pressure, which will help to prevent further damage to the kidneys. Since ribavirin is mainly eliminated through the kidneys it is not generally used for the treatment of HCV in someone with kidney disease. However, a few studies have found that ribavirin (usually low dose) in combination with interferon has produced better results in helping to manage MPGN. Other treatment options included plasmapheresis (removal of circulating cyroglobulins), and the use of corticosteroids.

It is important to note that there have been no studies of HCV inhibitors to treat MPGN. Talk with your medical provider about whether treatment is right for you.

**Related publications:**

- **Easy C: Help With Medicines**  
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**For more information**

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