Hepatitis C

Hepatitis C virus (HCV) is the most common chronic bloodborne infection in the United States. Over 4 million Americans have been infected with HCV and as many as 70% of those persons infected are unaware that they carry the virus. It is estimated that up to 85% of the people infected each year will develop chronic infection.

HCV is transmitted primarily through direct exposure to blood through an opening in the skin or mucous membrane. The hepatitis C virus infects the liver, causing inflammation that can cause cirrhosis (scarring of the liver), liver cancer and liver failure. It is responsible for 10,000 - 12,000 deaths each year.

There is currently no vaccine available to prevent hepatitis C.

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The American Liver Foundation is a national, nonprofit organization dedicated to the prevention, treatment and cure of hepatitis and other liver diseases through research, education and advocacy.

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daily ribavirin pills are prescribed for the treatment of chronic hepatitis C in patients who are at least 18 years of age, and have not previously been treated with alpha interferon. When used in combination therapy, ribavirin (Rebelot) is taken by mouth.

How effective is therapy?
Overall, studies with pegylated combination therapy have shown sustained response rates in 55% of patients. Overall response rates for pegylated interferon alone are approximately 24%. It seems that both forms of pegylated interferon (Peg-Intron and Pegasys) are equally effective.

What are the side effects of treatment?
Side effects can include “flu-like” symptoms such as fever, chills, headaches, muscle or joint aches, tiredness and weakness. These side effects usually decrease in severity as treatment continues. Some patients may experience depression. Some interferons may aggravate or cause neuropsychiatric, autoimmune, ischemic (decrease in blood supply) or infectious disorders. The ribavirin component of combination therapy can also cause a form of anemia.

Alcohol and hepatitis C
Alcohol is a potent toxin to the liver. Excessive drinking can lead to cirrhosis and its complications, including liver cancer. Patients with hepatitis C have a higher incidence of severe liver damage, cirrhosis, and a decreased lifespan, compared to individuals without the virus. It is suggested that the combination of alcohol and HCV accelerates the progression of liver disease. Total avoidance of all alcohol intake is recommended.

Iron and hepatitis C
The liver plays an important role in the metabolism of iron since it is the primary organ in the body that stores this metal. Excess iron can be very damaging to the liver. Studies suggest that high iron levels reduce the response rate of patients with HCV to interferon. Patients with chronic HCV whose serum iron level is elevated, or who have cirrhosis, should avoid taking iron supplements. In addition, these patients should restrict their intake of iron-rich foods, such as red meats, liver, and iron-fortified cereals, and should avoid cooking with iron-coated cookware and utensils.

Fat and hepatitis C
Patients with chronic HCV are advised to maintain normal weight. For those who are overweight, it is crucial to start a prudent exercise routine and a low fat, well-balanced, weight-reducing diet. Diabetic patients should follow a sugar restricted diet. A low cholesterol diet should be followed in those with hypertriglyceridemia. It is essential that patients consult with their physicians before beginning any diet or exercise program.

Protein and hepatitis C
A adequate protein intake is important to build and maintain muscle mass and to assist in healing and repair. Protein intake must be adequate to prevent muscle loss, or loss of liver cells. In combination therapy, pegylated interferon is taken with the antiviral drug ribavirin.

How is hepatitis C treated?
Current therapies approved by the U.S. Food and Drug Administration (FDA) include:
- Monotherapy with interferon (Infergen, Intron-A, Roferon-A) or pegylated interferon (Peg-Intron, Pegasys)
- Combination therapy - interferon or pegylated interferon with the antiviral drug ribavirin.

When is pegylated combination therapy prescribed?
The once-weekly pegylated injection and daily ribavirin pills are prescribed for the treatment of chronic hepatitis C in patients who are at least 18 years of age, and have not previously been treated with alpha interferon. When used in combination therapy, ribavirin (Rebelot) is taken by mouth.

What is pegylated interferon?
Interferon is a type of protein produced by the body's immune system to fight viral infections and affect the ability of viruses to divide in liver cells. In pegylation, one or more chains of polyethelene glycol, or PEG (a gelatinous component used to thicken food), are bonded to an interferon molecule. Whereas three injections per week are normally required to an interferon molecule, only one injection per week is required in combination therapy. In combination therapy, pegylated interferon is taken with the antiviral drug ribavirin.

What is the relationship between diet and hepatitis C?
General guidelines for individuals infected with HCV include maintaining a healthy lifestyle, eating a well-balanced, low-fat diet, and avoiding alcohol. A diet high in complex carbohydrates may be helpful in providing calories and maintaining weight. Since HCV infection may lead to loss of appetite, those individuals whose appetite is diminished may find frequent, small meals more easily tolerated. Adequate rest and moderate exercise can also contribute to a feeling of well-being.