

EVALUATION AND MANAGEMENT OF PATIENTS WITH CHRONIC HEPATITIS C

Veterans Health Administration National Hepatitis C Program
and
Hepatitis C Resource Centers



These recommendations describe principles of practice that should produce high-quality patient care. They are developed for use in the primary care setting, but are also applicable in other settings.

I BACKGROUND

- Many patients who use the Veterans Health Administration (VHA) system are infected with hepatitis C virus (HCV). The prevalence among these patients may be significantly higher than that in the general U.S. population (estimated to be 1.8 percent).
- Following acute infection, chronic HCV infection develops in more than 80 percent of cases. Spontaneous remission is rare.
- The natural history of HCV is highly variable. Approximately 20 percent of patients will develop cirrhosis over a 20- to 30-year period, although the majority will never develop this complication and will die of unrelated causes.
- It is impossible to predict reliably those who are at risk for liver disease progression, but excess alcohol consumption and co-infection with HIV are known to increase risk.
- Treatment for HCV is improving although limitations still exist. Among those who receive currently available anti-viral therapy, sustained resolution of infection (“cure”) is achieved in up to 50 percent, with higher rates of response in those with genotype 2 and 3 infections. Even for those who are not cured with treatment, there may be an improvement in liver histology, indicative of a “partial or incomplete” response.
- **Every veteran with HCV infection should be considered a potential treatment candidate.**

2 RISK FACTORS

The VHA recommends testing for HCV in veterans with one or more of the following characteristics that may indicate increased risk of infection:

- A desire to be tested
- Vietnam-era service*
- Blood transfusion before 1992
- Past or present intravenous drug use (even just one time)
- Unequivocal blood exposure of skin or mucous membranes
- History of multiple sex partners†
- History of or current hemodialysis
- Tattooing or repeated body piercing
- History of intranasal cocaine use
- Unexplained liver disease
- Unexplained abnormal ALT
- Heavy use of alcohol‡

Note: These variables are likely to be inter-related and are not necessarily independently related to risk for HCV infection.

* As currently determined by dates of service (1961–1975). Highest prevalence in the overall population is also seen in the age group represented by Vietnam-era service. No specific risk associated with military service has been identified.

† Defined as more than 10 lifetime sexual partners. Information about specific sexual practices associated with increase risk does not exist.

‡ Defined as more than 50 g of alcohol per day for ten or more years. An average alcoholic beverage contains 10-12 grams of alcohol.

FOR MORE INFORMATION

For more information on hepatitis C and VHA resources for hepatitis C, consult the VHA hepatitis C website:
<http://www.va.gov/hepatitisC/>

and the NIH Consensus Statement:
Management of Hepatitis C at:
<http://consensus.nih.gov/>

3 MANAGEMENT OF PATIENTS WITH NEWLY IDENTIFIED HEPATITIS C

Management of patients who are anti-HCV positive by ELISA should include the following steps:

1. Notify patient of HCV antibody test results in a timely manner.
2. Order appropriate tests to confirm infection and to determine the presence or absence of viremia by PCR, according to established testing algorithms (consult your diagnostic lab if unsure of the appropriate test).
3. Complete and document patient education about natural history, transmission, steps to minimize liver damage, and treatment options.
4. Evaluate for the presence of psychiatric or substance abuse conditions and offer treatment for these in conjunction with mental health and/or addiction specialists.
5. Encourage the patient to be vaccinated against hepatitis A and B if clinically indicated. (See *Vaccination Recommendations*.)
6. Offer counseling and testing for infection with HIV.
7. Evaluate for potential therapy in conjunction with specialists experienced in hepatitis C care. (See *Evaluation for Anti-viral Therapy*.)
8. Encourage patients to join a support group of individuals with HCV disease.

Every patient with chronic hepatitis C needs careful evaluation to determine the most appropriate disease management strategy.

A note about genotype tests:

HCV genotype determination is important for making decisions about specific treatment options and treatment duration. It does not, however, offer any prognostic information about the course of the disease, and usually should not be ordered as part of the basic, initial evaluation.

4 PREVENTING TRANSMISSION and DISEASE PROGRESSION

Counsel all HCV-infected patients about ways to prevent transmission to others:

1. If the patient is an active injection drug user, encourage enrollment in a drug rehabilitation program. If the patient continues to use injection drugs, discourage needle sharing and encourage use of clean needles.
2. Don't donate blood, organs, tissues or semen.
3. Avoid sharing household or personal items such as toothbrushes and razors.
4. Avoid high-risk sexual activity. There is a risk, albeit a low risk, of transmission of HCV to sexual partners. In patients with multiple sex partners, condoms and/or dental dams should be encouraged. Patients with only one sex partner need not change their sexual practices. Even in monogamous sexual relationships, use of condoms may reduce the already very low risk of transmission.

Emphasize that hepatitis C is not transmitted casually through holding hands, hugging or kissing, sneezing or coughing, sharing food or water, sharing eating utensils or sharing drinking glasses

Counsel all HCV-infected patients about ways to prevent progression of liver injury:

1. Avoid or significantly limit alcohol consumption. Consider seeking treatment from an addiction specialist if unable to stop excessive drinking.
2. Avoid high doses of nonprescription medications such as Tylenol® (McNeil Consumer Products) or other acetaminophen products (more than 2 g per day).
3. Consult a healthcare provider before beginning new medications, including herbal remedies.
4. Avoid infection with other hepatitis viruses by getting vaccinated against hepatitis A and B viruses as appropriate and clinically indicated. (See *Vaccination Recommendations*.)

5 VACCINATION RECOMMENDATIONS

WHY VACCINATE FOR HEPATITIS A AND B

- Patients with chronic liver disease are at increased risk for severe complications when infected with hepatitis A.
- Overlapping epidemiology of HCV and HBV infection suggests that those with HCV might have increased risk of acquiring HBV.

AVAILABLE VACCINES FOR HEPATITIS A AND B

There are two available vaccines for hepatitis A; two for hepatitis B and one combination vaccine against both hepatitis A and B. Patients should receive the combination vaccine if they have chronic liver disease and lack immunity to both hepatitis A and B. They should receive either hepatitis A or hepatitis B vaccination if they lack immunity to one virus but not the other.

SCHEDULE FOR VACCINATION AGAINST HEPATITIS B

Primary immunization for adults:

Three doses of hepatitis B recombinant vaccine given at 0, 1 and 6 months, intramuscularly

SCHEDULE FOR VACCINATION AGAINST HEPATITIS A

Primary immunization for adults:

Single dose of hepatitis A inactivated vaccine given intramuscularly;

A booster dose is recommended any time between 6 and 12 months after primary dose in order to ensure the highest antibody titers

SCHEDULE FOR VACCINATION AGAINST HEPATITIS A AND B with combined hepatitis A and B vaccine (Twinrix®)⁷

Primary immunization for adults:

Three doses of hepatitis A inactivated and hepatitis B recombinant vaccine given intramuscularly at 0, 1 and 6 months.

6 EVALUATION FOR ANTI-VIRAL TREATMENT

In order to determine need for therapy, anti-HCV positive persons should be assessed for:

- Confirmation of chronic infection. Patients who are not viremic as defined by sensitive PCR assays do not require further evaluation for treatment.
- Biochemical evidence of chronic liver disease by serum alanine aminotransferase (ALT) and serum aspartate aminotransferase (AST). Patients with persistently normal LFT's and no other clinical evidence of liver disease have an excellent prognosis and low risk of disease progression. Benefits of therapy in this group have not been clearly demonstrated. All patients with chronic hepatitis C should have liver function tests performed once or twice a year during routine healthcare evaluations.
- Severity of disease including tests of hepatic synthetic function (serum albumin, bilirubin and prothrombin time). Liver biopsy although not essential, is strongly recommended for those in whom anti-viral therapy is considered.
- Presence of potential contraindications to therapy including uncontrolled substance abuse, uncontrolled psychiatric disease, non-compliance, major non-hepatic disease. These patients should be re-evaluated after referral to an appropriate mental health or addiction specialist.
- Referral to a clinician experienced in this area of anti-viral therapy if there is chronic infection (positive PCR test) and evidence of liver injury (abnormal LFT's or impaired synthetic function).
- Presence of clinically significant portal hypertension or decompensated cirrhosis (ascites, esophageal varices, etc). Such patients should be evaluated by a liver specialist and possibly considered for liver transplantation. Early identification of transplant candidates is essential.

If therapy is indicated, follow the VHA Treatment Recommendations for Chronic Hepatitis C located in the Provider Education section of the website at: <http://www.va.gov/hepatitisC/>.

Patients for whom therapy is not currently indicated should continue to be monitored using the management recommendations and evaluation criteria listed above.