



Acute Infection with hepatitis C (HCV)

Most patients with acute HCV are asymptomatic. When they occur, symptoms include: anorexia, nausea, fatigue, weakness and malaise. Jaundice and dark urine are uncommon.

- Incubation period (exposure, to onset of symptoms): 2 - 16 weeks
- Window period (exposure to detectable positive test result):
 - (a) For hepatitis C antibody test : 4 - 26 weeks or more, but false positive and false negative test results may occur.
 - (b) For hepatitis C PCR : usually positive within 1 - 3 weeks.

75% people will develop chronic hepatitis C

(defined as virus in the bloodstream for > 6 months)

Symptoms vary and may include fatigue, abdominal pain, nausea, anorexia, depression and anxiety.

- ALT remains normal in one third of patients.
- In others ALT is variably elevated.

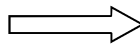
25% people will eliminate the virus

(usually within 3 - 6 months of exposure)

- The hepatitis C antibody test usually remains positive
- PCR for HCV becomes negative
- ALT usually returns to normal
- False negative PCR results occur infrequently.
- Antibodies do not confer protection against further Hep C infection.

Cirrhosis develops within 20 years in 5%-10% with chronic hepatitis C and in a further 10-15% by 40 years

- The rate of fibrotic progression is increased by continuing heavy alcohol intake, HIV and / or HBV co-infection, long duration of infection, obesity and established liver fibrosis.
- Monitor as per adjacent box



Hepatocellular carcinoma will develop in 3-5% per annum of people who develop cirrhosis

Progression to advanced liver disease is evidenced by diuretic resistant ascites, recurrent hepatic encephalopathy, spontaneous bacterial peritonitis, gastrointestinal bleeding, splenomegaly and muscle wasting.

Early hepatocellular carcinoma rarely gives rise to symptoms or signs.

This resource was developed by General Practice South for the Tasmanian General Practice Network.

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INVESTIGATIONS AND MANAGEMENT*

INITIAL INVESTIGATION:

Provide pre and post-test discussion.
Order HCV antibody test.

IF HCV ANTIBODY POSITIVE:

If HCV antibody test is positive, order HCV PCR test as positive HCV antibodies do not prove active infection.

IF HCV PCR POSITIVE:

Provide patient support services and information (see over)
Check ALT. If elevated this suggests some level of liver disease is present.

Check for viruses that increase risk of advanced liver disease:

- Hep B serology (Hep BsAg, Hep BsAb, Hep BcAb)
- HIV serology
- Hep A serology

Give hepatitis B +/- hepatitis A immunisation.

IF HCV PCR NEGATIVE:

Re-check the HCV PCR after at least 3 months. Two negative PCR tests 3 months apart suggest clearance of infection.
Consider Hep B vaccination if not immune to hepatitis B, particularly as patient is likely to be in increased risk category.

Counsel the patient regarding safer behaviours.

CHRONIC HEP C:

- See patient every 6-12 months
- Identify and address modifiable risk factors e.g. alcohol, obesity
- Perform clinical examination to look for evidence of chronic liver disease.
- Consider referral for combination therapy, with possibility of curing HCV in 50 - 80% of cases.

Conduct monitoring for liver disease

- FBE and LFTs every 6-12 months.

If evidence of cirrhosis or advanced liver disease, monitoring also includes:

- Coags
- AST/ALT ratio (abnormal > 1.0)
- AST/platelet ratio (abnormal > 1.5)
- Hepatocellular carcinoma screening may be indicated
- Alpha feto protein and ultrasound every 6 months

INDICATIONS FOR SPECIALIST REFERRAL:

1. Acute exposure
2. Ambiguous test results
3. Consideration of treatment
4. Persistently high ALT readings.
5. Individual wants more information regarding severity of liver disease
6. Management extra-hepatic manifestations
7. Cirrhosis, hepatocellular carcinoma

PRIOR TO SPECIALIST REFERRAL:

Above tests plus:

- Recent LFTs
- HCV RNA, genotype and viral load
- INR, FBE, U&E, Cr, TFTs
- +/- Alpha feto protein and Ultrasound

*General Practitioners and Hepatitis C.
Australasian Society on HIV Medicine (ASHM), 2008.

Hepatitis C - General Information

THOSE WHO SHOULD BE OFFERED HCV TESTING**:

1. Testing is indicated for individuals with clinical or biochemical evidence of liver disease and/or the extrahepatic manifestations of HCV infection.
2. Testing is indicated for individuals who have been exposed to risk factors associated with transmission of HCV most importantly injecting drug use, unsafe tattooing and imprisonment. According to Hepatitis Australia, "whilst the risk of Hepatitis C transmission from unsterile backyard tattoos is very real and may be growing, the actual number of new cases related to this activity is unknown."
3. In the presence of other factors that confer a lesser risk of infection the indication for testing is decided on a case-by-case basis.

Pre-test Counselling** should provide accurate information about safer practices that are appropriate to the person's gender, cultural beliefs and practices, behaviour, ongoing risk, understanding of hepatitis C and language and literacy level.

The discussion should include:

1. risk assessment and discussion of the reason for testing;
2. how to reduce the risk of becoming infected or infecting others-for example information about safer injecting when this is relevant;
3. possible desirability for other BBV testing and/or STI testing;
4. information about confidentiality and privacy;
5. information about the testing process including how results are to be provided, and the window period;
6. information about what happens to test results (ie the notification process);
7. seeking informed consent for the test to be conducted;
8. assessment of the person's preparedness to be tested;
9. information about what a negative or positive result means including basic printed information about hepatitis C; and
10. assessment of support mechanisms while waiting for the test result and/or if the result is positive.

Post-test Counselling** should be delivered to the patient as soon as possible after results are received from the lab. It is strongly recommended that test results be given in person. Other methods of communication should only be used in exceptional circumstances. Post-test discussion provides the opportunity to discuss health issues, referrals and prevention issues.

The post-test discussion should include:

1. giving the test result in person and in a manner that is confidential, sensitive and appropriate to gender, cultural beliefs and practices, behaviour, ongoing risk, understanding of hepatitis C and language and literacy level;
2. the need for further pathology - if the result is positive a PCR test is required;
3. re-assessing support mechanisms and requirements of the person and making immediate referral to a support agency to be accessed at the person's discretion.

If the result is negative, the discussion should include reinforcing harm reduction strategies, education and information messages about safer behaviours, and examining any difficulties or issues that the person may have in practising safer behaviours. It should be emphasised that a negative test result following a risk event does not indicate that it is likely to be safe to repeat risky behaviour. Antibody testing can take up to 6months to become positive. If risky behaviour occurs within this window period, or is ongoing, repeat testing should occur. The relief associated with a negative test result may also impede the processing of information and advice at that time.

If the result is positive, discussion should include at an appropriate time, issues such as:

1. the need for HCV PCR test to confirm if still infectious;
2. immediate needs and support including written referral information;
3. safer behaviours – education, information and support including needle and syringe programs if appropriate;
4. legal requirements for disclosure and how to disclose to family and friends; as well as legislative requirements (notification, contact tracing, storage and coding);
5. managing or understanding strong emotions, feelings, reactions and changes;
6. options in drug treatments and medical management;
7. ongoing counselling or therapy if required;
8. complementary/alternative management options;
9. ways to deal with loss and grief, depression, anger and anxiety;
10. strategies for managing hepatitis C which are flexible and appropriate to the person's needs.

SPECIALIST REFERRAL SERVICES:

Private gastroenterologists

Public hepatitis clinic, RHH

Public gastroenterology/liver clinics, LGH

Hepatitis C clinic, specialists clinics, NWRH

SUPPORT / INFORMATION SERVICES FOR PATIENTS WITH HEPATITIS C:

www.hepintas.com (TASCAHRD's Hepatitis support website)

Public and Environmental Health Service (State-wide service for advice on notification requirements, legislation, clinical epidemiology and contact tracing)
Freecall **1800 671 738**

Websites: Australian Society for HIV Medicine: www.ashm.org.au
Hepatitis Australia: www.hepatitisaustralia.com

MORE INFORMATION:

1. **National Hepatitis C Testing Policy, 2007
2. National Hepatitis C Resource Manual, 2nd Edition, 2008 (<http://www.health.gov.au/internet/main/publishing.nsf/content/phd-hepc-manual-2008>)
3. *General Practitioners and Hepatitis C. Australasian Society on HIV Medicine (ASHM), 2008. (<http://www.ashm.org.au/images/publications/booklets/gp%20august2008-web.pdf>)
4. Hepatitis C: An expanding perspective. Edited G Dore, M Temple-Smith, A Lloyd, 2009