



Summary of **Hepatitis C** for GENERAL PRACTITIONERS

HIV & HCV Education Project | School of Medicine | The University of Queensland

Transmission

RNA virus, blood borne, not considered transmitted sexually though is found in body fluids.

Australian Epidemiology (risk factors)

Injecting Drug Use	70-85%
Transfusion prior to 1990	5-10%
Vertical Transmission	< 5%
Sexual partner with HCV	< 5%
Unsterile tattoos/piercings	< 5%
No risk factor identified	10%

Prognosis

- 30 - 35% spontaneously clear virus
 - 65 - 70% develop chronic hepatitis C
- ↳ No symptoms in \approx 50%,
when present, these include lethargy and RUQ discomfort

HCV cirrhosis

- Only \approx 20% of patients will develop cirrhosis, usually after 20 to 30 years of infection
- 5 - year survival with compensated cirrhosis is \approx 90%, 10-year survival \approx 80%.
- Incidence of HCC in cirrhotic patients is \approx 2% per annum
- Liver transplant: HCV is the commonest indication for liver transplant in Australia

Predictors of progression

Alcohol, male sex, increasing age & duration of infection, Hep B/HIV co-infection

Management

- Alcohol: abstinence best, otherwise aim for 1 standard drink/day and no bingeing, Refer to Alcohol and Drug Service as necessary.
- Transmission prevention: care with blood, personal grooming items. HCV is not considered sexually transmitted.
- Weight management: Aim for ideal body weight (BMI 18.5 to 25 kg/m²).
- Immunise against other hepatitis viruses (Hepatitis A and B).
- Psychological support and counselling

Some investigations used in management of HCV (for complete work up investigations see over page)

- **LFTs** particularly **ALT** (Note: ALT is usually >AST)
- **Anti-Hepatitis C Antibody**: Indicates exposure to the virus, but not necessary ongoing infections. Specificity 98%, usually positive by 6 week after exposure.
- **HCV RNA**: If positive indicates active infection. Becomes positive \geq 2 weeks after infection
- Assessment of liver function
 - **PT & albumin** (Hepatic synthetic function)
 - **Bilirubin** (Hepatic excretory function)
 - **FBE** (Cirrhosis assoc with \downarrow Platelet and PMNs)
- Exclusion of other liver diseases, especially **Hepatitis B** (HBsAg, aHBs, aHBc)
- **Ultrasound**
 - Before referral (looking for space occupying lesions (SOL), echogenicity, portal hypertension)
 - Every 6 months in cirrhotic patients for HCC surveillance
- **Liver Biopsy** is used to confirm diagnosis and assess severity of liver injury (liver fibrosis and disease activity).

Antiviral Therapy

Pegylated Interferon and Ribavirin 6-12 months depending on genotype. Most patients are treated in Public Hospital Clinics.
Cure rate range 55–60%

Referral

For a person who is HCV RNA positive who would consider antiviral therapy. Do tests over the page prior to referral



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Tests to complete prior to Referral (Work up Investigations)

- **LFTs:** particularly **ALT**. Preferably second monthly for the past six months. (Note: ALT is usually >AST in viral hepatitis)
- **Anti-Hepatitis C antibody:** Indicates exposure to the virus but not necessarily ongoing infection. Specificity 98% and usually positive by 6 weeks after exposure.
- **HCV RNA:** If positive, indicates active infection. Becomes positive ≥ 2 weeks after infection
- **Full Blood Examination (FBE):** Cirrhosis and Portal hypertension is associated with decreased Platelets and Neutrophil counts.
- **Prothrombin times & Albumin** to assess Hepatic synthetic function
- **Bilirubin** to assess Hepatic excretory function
- **Hepatitis B serology:** Anti-HBc; HB surface Ag; Anti-HBs
- **Ferritin/Transferrin saturation:** iron studies to screen for Hemochromatosis
- Anti Smooth muscle antibody (ASM); anti-mitochondrial antibody (AMA); anti-nuclear antibody (ANA) – markers of autoimmune liver disease
- $\alpha 1$ -antitrypsin phenotype (liver disease is associated with "z" allele)
- Caeruloplasmin: marker of Wilson's disease
- **Thyroid Function Tests:** serves as a baseline as autoimmune thyroid disease may occur as a result of treatment
- Liver & Biliary tree **Ultrasound:** to assess anatomy and appearance of liver: looking for space occupying lesions (SOL), echogenicity, portal hypertension. This is important to assess if there is gross fibrosis or fat in the liver and also pre-biopsy (if needed) for safety.

For more information:

- Australian Family Physician: Hepatitis C Update
(Family Physician Vol 32, No.10 Oct 2003. pages 795 – 834)
- Hepatitis Council of Queensland for information & patient counselling
Phone: 07 3236 0610 or **Phone:** 1800 648 491
Email: reception@hepqld.asn.au **Web:** www.hepqld.asn.au
- HIV & HCV Education Projects, School of Medicine,
The University of Queensland for GP information & HCV courses.
Phone: 07 3346 4813 **Fax:** 07 3346 4757
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