PBS-subsidised treatment, it is probable that a greater number of patients will request referral to consider antiviral therapy. Many patients with signs of significant liver disease will still be recommended to undergo a liver biopsy as the presence of cirrhosis can modify the approach to the use of interferon and ribavirin.

# Will most patients with hepatitis C decide to undergo treatment?

At present some patients, having been given advice about their liver function and the treatment outcome, decide to defer treatment. This is a reasonable decision for many patients, particularly those who have a genotype 1 or 4 infection which responds less well to current therapies. However, if a patient has clear clinical signs or biochemical evidence of significant liver disease, this decision should be questioned. If necessary these patients can be referred for further discussion with a second clinician with an interest in hepatitis C to ensure that they are receiving at least two opinions on whether to defer treatment or not.

#### Adverse reactions to treatment

Some patients tolerate therapy well and develop few adverse effects from their course of therapy. A significant percentage do develop troublesome adverse effects which include mood swings, irritability, headaches, insomnia, flu-like symptoms, dry skin, myalgia, arthralgia and thinning of the hair. Treatment can cause exacerbation of epilepsy, diabetes and psoriasis.

A small percentage of patients develop serious adverse effects which include anaemia, thrombocytopenia, leucopenia, depression and psychosis. Sudden haemolytic anaemia can precipitate cardiovascular symptoms in those who have previously not had evidence of clinical ischaemic heart disease. In older patients it is wise to explore their family history of coronary artery disease and to perform an ECG if there is any suggestion that they may have asymptomatic coronary artery disease.

## Follow-up

The care of patients is often shared between the liver unit and general practitioners. To assist general practitioners with monitoring their patients, liver units in Australia will normally provide a protocol for testing. Patients should be tested for liver function, full blood count and thyroid function second monthly and if there is concern other investigations may be ordered.

#### Conclusion

Hepatitis C itself is often not going to cause severe liver disease. It is the combination of the viral infection plus factors such as alcohol excess, obesity, diabetes and haemochromatosis that leads to more severe liver disease. Addressing the secondary factors will lead to significant changes in liver function thus

allowing a decision on requirements for antiviral therapy to be made in a more rational way.

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# **Further reading**

Australian Hepatitis Council.Treatment of hepatitis C. http://www.hepatitisaustralia.com/pages/Treatment\_of\_HEPATITIS\_ C.htm [cited 2006 Mar 8]

Conflict of interest: none declared

See also **Dental notes** page 52

# **Patient support organisation**

#### **Australian Hepatitis Council**

The states and territories have independent Hepatitis Councils which provide information, support, referral and counselling about hepatitis C.The Australian Hepatitis Council website contains many resources, fact sheets and links.

Website: www.hepatitisaustralia.com

## Self-test questions

The following statements are either true or false (answers on page 55)

- Most patients with hepatitis C will develop cirrhosis within 20 years.
- A patient's lifestyle may affect the response to treatment for hepatitis C.