Hepatitis C for the General Practitioner

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Testing for hepatitis C

- Why should patients be tested?
- Who should be tested?
- What tests to do?

Why test for hepatitis C

- Hepatitis C is common
  - Prevalence between 0.8-1%
    - 272,000-340,000 people in Canada
- All patients with hepatitis C will develop progressive liver disease
  - Rate of progression is variable
  - Some will never develop cirrhosis
    - This is unpredictable
- Hepatitis C is curable
  - Cure rate 80-100%

Who should be tested for hepatitis C: Risk-based testing

- Test patients who fall into recognized at-risk groups
  - Anyone who ever used injection drugs, even once, and even if it was many years ago
  - History of incarceration
  - Tattoos in an unlicensed parlour
  - Anyone transfused before 1990
  - Immigrants from countries where hepatitis C is highly prevalent
    - Italy
    - Egypt
    - Somalia
    - Japan
    - All Eastern European countries
    - Vietnam

Who to test for hepatitis C: Population-based testing

- Risk-based testing not very effective
  - Risk factors often not recognized
- Canadian Liver Foundation recommends testing all adults born between 1945 and 1975.
  - Accounts for more than 80% of all hepatitis C in Canada
  - Includes most previous injection drug users
  - Includes most at-risk adult immigrants

How to test for hepatitis C

- Anti-HCV
  - Indicates exposure
  - Does not confirm current infection
    - About 20-30% will clear virus but remain antibody-positive
- If positive this has to be followed by
  - HCV RNA and HCV genotype
    - Positive HCV RNA confirms active infection
    - Genotype and viral load are important to decide on treatment strategy
- Liver blood tests
- Tests of fibrosis
  - Biopsy
  - Fibrotest
  - Fibroscan

Liver blood tests

- These are tests that should be done in patients with hepatitis C to assess liver disease
  - ALT
    - Marker of hepatic inflammation
    - A normal ALT does not exclude significant liver disease
    - Any elevation of ALT requires further investigation
  - Bilirubin, albumin, INR
    - These are tests of liver function
    - Any abnormal tests requires further investigation
  - CBC
    - A low platelet count raises the possibility of cirrhosis
  - Ultrasound

Indicators of possible cirrhosis

- AST > ALT
- Elevated ALP with no other explanation
- Low platelets
- Low white cell count
  - (excluding constitutional low levels in people of African descent)
- Ultrasound findings of
  - Coarse echotexture of the liver (assuming no fatty infiltration)
  - Unexplained splenomegaly
  - Nodular liver

Who should be treated for hepatitis C

- Treatment decision takes many variables into account
  - Patient wishes
  - Likelihood of response
  - Urgency or lack of urgency for treatment
  - Severity of liver disease
- All patients should be evaluated for treatment
  - Patients with normal or only mildly elevated ALT should also be assessed for treatment
    - Some will have advanced fibrosis or cirrhosis

Hepatitis C and Liver Cancer

- There is an increased risk of liver cancer in patients with hepatitis C
- The risk is largely limited to patients with cirrhosis
  - Late stage fibrosis (stage III) also has an increased risk, although not as high as with cirrhosis
- Patients at high risk should undergo HCC screening with ultrasound once every 6 months