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