Une traduction française suit cet article

Hepatitis C

The hepatitis C virus (HCV) — the agent responsible for 90% of non-A, non-B viral hepatitis cases — was characterized in 1989.[1] Public education about HCV infection and programs that promote testing for injection drug users and for people who received blood transfusions before 1990 (when donor screening for HCV began) have increased the demand for medical advice about HCV infection. Physicians also encounter current blood donors identified through routine screening as having HCV antibody (anti-HCV), as well as patients with undetected HCV infection who seek a medical opinion because of symptoms. The cumulative burden of hepatitis C is large, and its future societal and medical costs are likely to be high. It is therefore important that physicians be well informed about HCV infection.

Epidemiology

In Canada, injection drug use is associated with at least half of HCV infections,[2,3] but the actual proportion may be much greater; further, there is a high prevalence of anti-HCV among injection drug users.[4] The receipt of blood and blood components, especially before 1990, is the second most important risk factor for HCV infection;[2,3] however, this risk has decreased markedly from perhaps 30% in the 1960s to 1.3% in the late 1980s to 1 in 103 000 today.[5,6] The risk of infection through sexual intercourse with a carrier is estimated at 2.5% over 20 years.[7] Transmission from mother to child is uncommon, and the question of risk to breast-fed infants of infected mothers is unresolved.[7] The risk of infection after needlestick injury is estimated at 4% to 10%.[7] HCV infection can also be associated with organ transplantation, renal hemodialysis and unsterile tattooing. Body piercing has not been implicated so far.[8]

In 1995, 14 070 newly diagnosed cases of HCV infection were reported from 8 provinces and territories (Laboratory Centre for Disease Control, Ottawa: unpublished data); it is likely that most of these cases were not newly acquired. Among a sample of pregnant women in British Columbia, 0.9% were anti-HCV positive (Dr. David Pi, St. Paul's Hospital, Vancouver: personal communication, 1997), as are 0.2% of current new blood donors in Canada (Dr. Peter Gill, Canadian Red Cross Society, Ottawa: personal communication, 1997).

Natural history

Only 5% to 25% of people with newly acquired infection have symptoms,[7] which are similar to but often milder than those of hepatitis A or B.[9] Up to 90% of infected persons continue to carry the virus indefinitely (as confirmed by the presence of HCV RNA). These people are at risk of clinical sequelae such as profound fatigue (50% at 10 years), cirrhosis (25% at 20 years) and liver cancer (5% after 30 years).[9,10] Liver disease related to HCV infection is the leading reason for liver transplantation in Canada.[11]

There is an imperfect correlation between symptoms or abnormal liver function test results on the one hand and the severity of hepatitis C or cirrhosis (as assessed by liver biopsy) on the other. Among a sample of blood donors in Montreal who had HCV infection but were otherwise apparently healthy, 37% had chronic hepatitis without fibrosis, 43% had chronic hepatitis with fibrosis and 20% had cirrhosis.[12] Given the indolence of HCV infection, many infected people die of other causes before clinically significant hepatitis C develops.

Management

The diagnosis of HCV infection requires testing for anti-HCV. Test results are usually positive approximately 6 to 8 weeks after the patient's exposure to HCV.[9] Initial testing is by enzyme immunoassay (EIA), and positive results are then confirmed, usually by recombinant immunoblot assay (RIBA).[7] Given that the sensitivity of EIA is perhaps 95%, a few cases will be missed. However, the predictive value of a confirmed positive anti-HCV test result is high, and patients with positive results must be considered to have HCV infection. HCV RNA testing is not standardized and is not essential to patient management.

Patients with symptoms, signs or laboratory evidence of adverse consequences of HCV infection should be referred for specialist assessment.[10] Interferon is the only established treatment for chronic HCV infection; Canadian guidelines for such treatment have been published[13] and are being updated. Interferon therapy is aimed primarily at patients with HCV infection who have chronic hepatitis as indicated by persistent elevation of the alanine aminotransferase (ALT) level and should be supervised by a physician experienced in its use. A treatment period of 6–12 months is recommended, but if the ALT level has not fallen to normal after 2–3 months interferon should probably be stopped.[14] Only 25% of infected patients may be candidates for interferon therapy and, among those

who are treated, only 10% to 25% will show prolonged clinical and virologic remission.

Patients with HCV infection need support and counselling with regard to their clinical illness and strategies to prevent transmission to others. For example, they should be informed about expected quiescence of the disease for long periods and about minimizing exposure to hepatotoxins such as alcohol. Patients should be advised not to share items potentially contaminated with blood (such as needles, toothbrushes and razors) and not to donate blood, organs or tissues.[10] Definitive advice regarding prevention of sexual or vertical transmission cannot be given, but current information about risks and prevention should be provided. Recommendations could well include that those infected with HCV but not in a monogamous long-term relationship should practise safer sex (e.g., by using condoms); those in a long-term relationship should discuss the matter with their partner, including the question of whether to employ safer sex methods, and the long-term partner should be offered anti-HCV testing.[7,9,10] Specific recommendations against pregnancy or breast-feeding cannot be made.[7]

Newly diagnosed cases should be investigated to establish the most likely source and date of infection. Cases of HCV infection should be reported to the local medical officer of health in accordance with provincial and territorial regulations. This will allow, among other things, notification of the Canadian Red Cross Society if the probable source of infection is receipt of blood or blood products or if the patient donated blood after being infected.

Information sources

Canadian Liver Foundation
200–365 Bloor St. E
Toronto ON M5W 3L4
1 800 563-5483
www.liver.ca

Hepatitis C Society of Canada
383 Huron St.
Toronto ON M5S 2G5
1 800 652-HEPC (4372)
web.idirect.com/~hepc

HepNet: the Hepatitis Information Network
www.hepnet.com

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