

Summary

- hepatitis A is a viral infection of the liver;
- it is spread through the faecal-oral route or when infected faecal matter enters the mouth;
- symptoms can be debilitating but most people infected with hepatitis A recover completely;
- once you have had hepatitis A you cannot get it again; and
- vaccination against hepatitis A is available.

About the virus

Hepatitis A is an acute (short-term but quite severe) infection of the liver caused by the hepatitis A virus. The hepatitis A virus can survive in the environment on hands for several hours and in food kept at room temperature for considerably longer and is relatively resistant to detergents.

Hepatitis A occurs worldwide. In developing countries most people are infected during childhood due to poor sanitation. With good sanitation and hygiene in the developed world, most people now reach adulthood without being exposed to hepatitis A virus.

In Australia, there are approximately 300–500 cases of hepatitis A reported per year. The number of cases reported has been declining nationally since the late 1990s.¹

The real number of hepatitis A infections is likely to be more than the number of infections reported. This is because many people with hepatitis A do not have obvious symptoms, do not go to the doctor and so are not tested for hepatitis A.

Up to 40% of people with hepatitis A have no identifiable risk factors for infection.

In Australia infection with hepatitis A is more likely in particular locations and amongst specific groups of people, including:

- child day-care centres and pre-schools;
- men who have sex with men;
- injecting drug users;
- residential facilities for the intellectually disabled; and
- travellers to countries where the infection is common (Asia, Africa, South-Pacific, Central and South America).

Infection resulting from contaminated food or water, or an infected food handler is rare in Australia.

Symptoms

Infants and young children infected with hepatitis A will rarely show symptoms of infection and may appear quite well, or have only mild symptoms. The majority of adults will show symptoms. Symptoms of hepatitis A include:

- fever;
- weakness;
- fatigue;
- loss of appetite;
- nausea;
- joint aches and pains;
- vomiting; and
- jaundice (yellowish eyes and skin, dark urine and pale-coloured faeces).

¹DoHA [Department of Health and Ageing] 2006, Number of Notifications of Hepatitis A. Retrieved October 25, 2006, from National Notifiable Diseases Surveillance System.

The duration of the illness varies but most people feel better and their Liver Function Tests (LFTs) begin to normalise a month after the onset of infection. Hepatitis A infection never causes a chronic (long-term) infection.

Death because of hepatitis A infection is very rare. The likelihood of severe disease or death resulting from hepatitis A infection is much greater in people with pre-existing liver damage, including people with chronic liver disease due to hepatitis B or C, and people over 50 years of age.

Transmission

Hepatitis A is most commonly spread by the faecal-oral route. Faecal-oral transmission of the hepatitis A virus may occur when anything that has been contaminated with infected faeces is put in the mouth, for example:

- food, liquid or eating utensils can transmit the virus from an infected person;
- touching nappies, linen and towels soiled with the faeces of an infectious person; and
- direct contact (including sexual) with an infectious person.

Testing

The incubation period (time between exposure to the virus and the development of symptoms) varies between 15 and 50 days, with an average of 30 days. Hepatitis A virus is excreted for up to two weeks before the onset of symptoms. Therefore, people with hepatitis A should be considered infectious for a week after the onset of jaundice.

Hepatitis A is diagnosed by a blood test. The detection of IgM hepatitis A antibodies (anti-HAV IgM) confirms recent infection. These antibodies are present for three to six months after infection. The detection of IgG hepatitis A antibodies (anti-HAV IgG) indicates past infection and immunity against hepatitis A infection.

Liver function test (LFTs) abnormalities, specifically elevated serum bilirubin and serum aminotransferase (ALT and AST) values, may also indicate acute liver infection.

Treatment

There is no medical treatment available for hepatitis A. The symptoms of hepatitis A may be relieved by rest and adequate fluid intake. Medications should be limited to those considered essential and alcohol should be avoided.

Prevention

To avoid the transmission of hepatitis A:

- always wash hands thoroughly after going to the toilet, before preparing and eating food, after handling soiled linen e.g. nappies;
- avoid sharing food, cutlery, crockery, cigarettes and drinks with other people;
- when travelling in regions with poor sanitation, drink bottled water and avoid eating food that has been cleaned or prepared using contaminated water;
- in a natural disaster, listen to warnings about contaminated drinking water and follow any instructions issued by the relevant authorities; and
- consider being vaccinated (see below for more details).

Vaccination

A vaccine is available to protect against hepatitis A infection in people two years of age and older. There are currently five hepatitis A vaccines and two combined hepatitis A/hepatitis B vaccines registered for use in Australia. The vaccines are made from inactive hepatitis A virus. The body reacts with the inactive virus to produce antibodies that protect against infection. Clinical trials have shown that the hepatitis A vaccine is effective in preventing infection in about 95% of people.

Protection begins within 14-21 days after the first dose of the vaccine. A second dose of vaccine is required for long-term protection. The duration of immunity following vaccination is not certain, however, it appears to be at least 10 years, probably longer.

The Australian Immunisation Handbook² recommends hepatitis A vaccinations for:

- travellers to endemic areas, which means developing countries;
- all Aboriginal and Torres Strait Islander children between 18 months and six years of age in north Queensland;
- those working in rural and remote Indigenous communities;
- child day-care and pre-school personnel;
- the intellectually disabled and their carers;
- healthcare workers employed in paediatric wards, intensive care units and emergency departments that provide for substantial populations of Aboriginal and Torres Strait Islander children and nursing and medical staff on rural and remote Indigenous communities;
- sewage workers;
- men who have sex with men;
- injecting drug users;
- patients with chronic liver disease of any aetiology; and
- patients with haemophilia who may receive pooled plasma concentrates.

People at risk of exposure to both hepatitis A and hepatitis B, particularly healthcare workers, people who inject drugs, men who have sex with men, travellers and long-term visitors to developing countries, should consider receiving the combined hepatitis A/hepatitis B vaccine.

It is recommended that people with hepatitis C are vaccinated against both hepatitis A and hepatitis B.

The most common adverse event following administration of the hepatitis A vaccine is mild local pain at the site of injection, but this should last only a short time.

Pregnant women should delay being immunised against hepatitis A until after the pregnancy, unless there is a substantial risk of them being exposed to the virus.

People who are in close household or sexual contact with someone with hepatitis A should receive normal human immunoglobulin within two weeks of exposure.

Administration of the immunoglobulin will prevent infection for approximately six weeks. Hepatitis A vaccine can be given at the same time as the immunoglobulin.

²National Health & Medical Research Council, (2003). The Australian Immunisation Handbook. 8th Edition