



## HEPATITIS C

Information, advice, testing,  
support & training service

### ACUTE HEPATITIS C

The acute phase of hepatitis C is the period of 6 months following the initial exposure to the virus. Only about one-third of people initially infected with Hepatitis C develop symptoms. These may include mild flu-like symptoms, jaundice, fever, and nausea.

So most people never know when they have caught HCV and so doctors and researchers are not able to study the acute phase. There is not a lot of information about the course of acute Hepatitis C.

What we know is mostly from experimental studies where hepatitis C was given to chimpanzees. As well there are some data from small studies of people who acquired hepatitis C from blood transfusions and needle-stick accidents.

People exposed to the hepatitis C virus usually develop detectable HCV antibodies within one to two weeks after exposure. In the first two weeks of the acute phase HCV RNA (viral load) quickly rises (5 to 10 million IU/ml [international units]), just before the ALT levels starts to peak and symptoms start to appear. The ALT levels will begin to rise as high as 1000 IU/ml, indicating liver inflammation. If any symptoms do appear they can last from 3 to 12 weeks after exposure.

Interestingly, the people who develop symptoms are more likely to spontaneously clear the virus (naturally rid the hepatitis C virus from their bodies).

The reasons for spontaneous clearing are not completely understood, but some studies have shown that a broad-based immune response by CD4 and CD8 T-cells to the hepatitis C virus helps to eliminate the virus. There is also some evidence that other factors influence spontaneous clearing, such as:

- Gender – women seem to resolve acute infection more than men, but this data is controversial.
- Age at time of infection – 40-45% of children born to hepatitis C infected mothers will spontaneously clear HCV.
- Other studies have shown that 70% of people below the age of 20 cleared the virus as opposed to 24% of those age 20 or older.

- Immune status – chronic infection rates are higher in people with HIV.

Acute hepatitis C is rarely fatal unless there are other liver diseases present at the time of exposure.

### **Treatment**

Treatment of acute HCV is currently undergoing research. In some studies the sustained virological response is as high as 95-98%. There have been no studies that have found that adding ribavirin to interferon increases treatment response.

Since some people may clear the virus on their own, there is ongoing research to find out the optimal time to start HCV therapy and what factors would increase the likelihood for successful treatment of acute Hepatitis C.

### **Chronic**

If a person tests positive for the hepatitis C virus 6 months following exposure, it is called chronic hepatitis C.