



## NORTH LONDON BLOOD TRANSFUSION CENTRE

### A POSITIVE TEST FOR HEPATITIS C ANTIBODY -

#### WHAT DOES IT MEAN?

##### Introduction

Blood donations are routinely tested for a number of infectious agents which are known to be transmitted by blood. Human immunodeficiency virus (HIV), the virus which causes AIDS, is the one which most readily comes to mind. Donated blood has however been tested for many years for the hepatitis B virus (HBV) and for evidence of infection with syphilis.

Since 1991, a test has been used to detect another hepatitis virus known as hepatitis C virus (HCV).

##### What is hepatitis?

Hepatitis literally means inflammation of the liver and this inflammation can be caused by many irritants, the commonest being alcohol. Some viruses are known to cause hepatitis. In an acute illness with such a virus the liver can show signs of severe inflammation which is detectable by blood tests. Most individuals who 'catch' any of the various forms of viral hepatitis recover completely. Some individuals, however, do not clear all the viral material from their body and they then become carriers of the infection. We know this to be so in HBV and HCV infection. Individuals who are carriers of these viruses usually feel completely well and are unaware of their condition. It is only by using very special tests that the carrier state can be revealed.

### Testing for HCV

Tests for HCV are relatively new and donated blood has been tested only since September 1991. Because the virus itself has not been isolated the tests rely on detecting antibody in the individual's blood. Antibody formation is the body's response to 'foreign' material and its presence is a signal that a particular individual has met the 'foreign' material at some point in the past. Many antibodies are protective and this mechanism is the basis of immunisation against infectious disease. In the case of HCV however, it appears that the antibody may not be protective but only be a signal of infection.

As yet the tests we have available for HCV cannot say with any certainty whether an individual with antibody is infectious or immune and the latter state seems to be rare.

### Transmission

We know the hepatitis C virus is transmitted by blood and by sharing needles. These two routes seem to be the most efficient ways of passing the virus on to others. It is also possible that the virus can be transmitted by sexual intercourse although this seems to occur rarely. A person carrying the virus will thus need to consider informing his/her sexual partner, who may also wish to be tested. If the partner is negative for antibody to HCV then the use of condoms may be considered in order to protect the partner from the very small risk of infection with HCV.

HCV is not transmitted by normal social contact or by sharing eating utensils.

### Illnesses

It is known that a small proportion of carriers of HCV go on to develop chronic liver disease, which may include cirrhosis. Extremely rarely liver tumours may develop. At present, very little is known about the long term effects of HCV. Also, because these conditions develop over a number of years, it is impossible to predict the outcome in any particular individual although additional tests at a specialist liver centre may give more information.

We do know, however, that alcohol is a liver irritant and it is probably sensible for all hepatitis carriers to reduce or eliminate its consumption to avoid exacerbation of any ill effects of viral infection.

### Treatments

Treatments are being tried for carriers of hepatitis, Although none are completely satisfactory, some are helpful in a proportion of cases. There are a number of specialist centres dealing with hepatitis and it is in the individuals interest to be known at one of these. A full assessment can be performed there and useful treatment can be offered. Clearly one's own doctor should also be aware of the hepatitis C test result so that referral can be arranged. The Transfusion Centre will, with permission, pass our findings on to him/her. There is probably no indication to inform others apart from any sexual partner.

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