

To Dentists

Dear Colleague,

As you know laboratory tests for antibodies to the Hepatitis C virus (HCV) have recently been developed, and are now sufficiently sophisticated to be put to large scale use. Because this form of Hepatitis can be transmitted by blood transfusion (it is thought that about 5% of HCV infections are transfusion-related) the National Blood Transfusion Service will, from September 1st 1991, be testing all blood donated. Donations found to be initially Anti HCV positive (perhaps 1 in 200, or approximately 800 in the first year) will be tested further, and we estimate that 70 - 80 donors will be "confirmed positives" in the first year in the North East Thames Region.

We will be informing all donors confirmed as anti HCV positive, and hope to liaise with their General Practitioners, whom we feel are the most suitable doctors to give individual advice to their patients. We are advising that the donor informs his or her dentist, so you may well have some patients telling you that they are Anti HCV positive.

Fortunately it appears that the virus can be killed by the standard disinfection procedures carried out by Dental Practitioners. Therefore, the precautions that dentists need to take to guard against transmission of Hepatitis C are those which are already being employed in connection with other infections transmissible by blood or body fluids, namely, the wearing of gloves, mask and eye protection by the dentist and the careful disinfection of instruments between patients.

If you have any queries then please contact a member of the medical staff at the Regional Transfusion Centre.

Yours sincerely,

GRO-C

Jean F Harrison
Director

HCV/GDP1/Aug 91/JFH

HEPATITIS C VIRUS - CURRENT KNOWLEDGE

Even after the introduction of screening of blood donors for Hepatitis B, cases of post-transfusion hepatitis (PTH) continued to occur. These and similar non-transfusion-related cases were known as non-A non-B hepatitis (NANBH). Recently the virus thought to cause over 90% of post-transfusion NANBH has been identified indirectly. Chimpanzees infected by blood from PTH patients produced RNA viral material which reacted with antibody present in PTH patient serum. This virus is now called "Hepatitis C virus" (HCV) and is thought to be an RNA virus, of about 10,000 nucleotides and to be related to the flaviviruses (the virus has not yet been cultured). It has no relationship to Hepatitis B or HIV.

TRANSMISSION

Certainly by shared needles in drug users (60-90% of drug addicts are Anti-HCV positive) and blood transfusion. A large number of multitransfused patients (haemophiliacs, thalassaemics, leukaemics) are positive, but overall only 5% of HCV cases are related to transfusion. The risk of transmission via sexual intercourse, within families and from mother to baby seems to be very low. In over 40% of cases the route is unknown.

INCIDENCE

Studies by the NBTS suggest that 1/2000 of the general population may be Anti HCV positive - more information will emerge with general donor screening. We do not know how many of these are still infectious.

CLINICAL COURSE

Vast majority are asymptomatic (but very immunosuppressed patients - eg bone marrow transplants-can become severely ill). Probably 50% of patients infected through transfusion or drug abuse will develop chronic liver disease; and cirrhosis and (very occasionally) liver cancer can follow. The incidence of chronic disease in "blood-unrelated" HCV is probably lower (? due to viral dosage effect?).

LABORATORY TESTS

Serum antibody to HCV. Confirmatory tests, including PCR test for viral RNA, are available. It has been suggested that if two batches of liver function tests (3 months apart) are normal, no further action is indicated at present. If abnormal, specialist referral is advisable. Current specialist treatment may include liver biopsy and antiviral agents (eg Interferon).

DISINFECTION

By analogy with other similar viruses, sterilisation by the usual chemical/boiling means should be adequate. Plasma products for transfusion which have been treated to kill the HIV virus are also HCV-free.

RECOMMENDATIONS FOR INVESTIGATION AND COUNSELLING OF PATIENTS FOUND TO HAVE A POSITIVE HCV ANTIBODY TEST BY THE BLOOD TRANSFUSION SERVICE.

It is recommended that:

1. The patient should be questioned about any relevant symptoms/signs e.g. previous jaundice, and asked if there is any history of blood transfusion or intravenous drug use.
2. A physical examination to exclude signs of liver disease, hepatomegaly or splenomegaly should be performed.
3. A blood sample should be taken for liver function tests.

If all findings are negative and tests normal, the patient should be seen again in 3 months. If the examination and blood tests are again normal, then no further follow up is recommended.

If there are any abnormal findings then referral to a specialist (either a local gastroenterologist or Dr Murray-Lyon or Dr Dusheiko) is recommended. If the findings are unclear, or the patient very anxious, then either Dr Murray-Lyon or Dr Dusheiko will be happy to advise.

COUNSELLING HCV ANTIBODY POSITIVE PATIENTS

The following notes may help in answering questions from patients:

1. The majority of people who have antibodies to Hepatitis C in their blood do not have liver disease.
2. Even if abnormal liver function is detected, treatment can be given and the prognosis is good in the majority of cases.
3. In most cases, we do not know how the infection is spread. There is no evidence that Hepatitis C is spread by day to day contact, i.e. between people living in the same household. The main risk of spread is by blood to blood contact, e.g. transfusion or needle sharing. People should not share razors or toothbrushes.
4. Sexual transmission can occur, but is uncommon. No special precautions are needed for sexual contact with a regular partner. People who have many sexual partners should use condoms anyway, to protect against HIV (AIDS) transmission.
5. People who are HCV antibody positive should not donate blood and should not carry kidney or organ donor cards.
6. Existing life insurance policies will not be affected by the new information that a patient is HCV antibody positive. If a patient wishes to take out a new insurance policy, he/she must declare him/herself to be anti HCV positive. The insurance company is unlikely to understand the significance of this and so, to avoid large premiums, it is suggested that the patient should obtain a letter from a specialist to provide the relevant information about the risks of Hepatitis C.
7. Patients should be advised to inform their dentist that they are anti-Hepatitis C positive.

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HCV/GP2/Aug 91/JFH

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