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Follow up of blood donors positive for antibodies to hepatitis C virus

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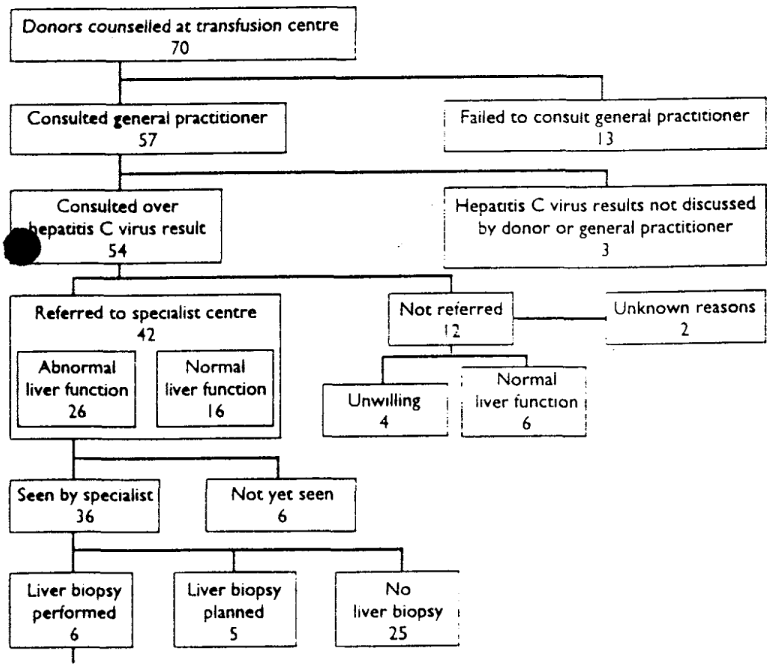
The hepatitis C virus has been identified as the main cause of post-transfusion hepatitis.[1] Mandatory screening of blood donations for antibodies to hepatitis C virus was introduced by the National Blood Transfusion Service on 1 September 1991. Donors confirmed to be positive for antibodies to hepatitis C virus at the North London Blood Transfusion Centre are offered counselling by medical staff at the centre, who explain the relevance of the test results. They are then referred to their general practitioner.

Current evidence suggests that many of the asymptomatic donors positive for antibodies to hepatitis C virus are chronic carriers, in whom the virus replicates.[2] Probably some asymptomatic donors will progress to clinically significant, and possibly severe, liver disease in the future. Follow up of the donor by the general practitioner or hospital clinic, or both, will be influenced by information and advice given as a result of the initial counselling. To date there has been no information on the effectiveness of the counselling procedure and the fate of donors after leaving the transfusion centre. We carried out a postal survey on the follow up arrangements for blood donors positive for antibodies to hepatitis C virus.



Flow chart showing management of anti-HCV positive blood donors

Subjects, methods, and results

A postal questionnaire was sent to 83 of 107 blood donors positive for antibodies to hepatitis C virus who had been identified and counselled at the North London Blood Transfusion Centre until the end of June 1992. The remaining donors were excluded either because they had failed to attend for counselling (16 donors) or because they were uncontactable (eight donors). A questionnaire was then sent to the doctors of 80 of these donors (two donors withheld consent and in one case the general practitioner was unknown). Replies were received from 50 donors and 61 general practitioners (response rates 60% and 76% respectively). Taken together, the questionnaire responses gave information on 70 donors. Presentation of the donor to the general practitioner and subsequent management by the general practitioner are shown in the flow chart. The demographic details and possible sources of infection of these donors have been analysed separately.[3]

Most of the donors positive for antibodies to hepatitis C virus were referred for specialist opinion irrespective of whether their liver function was reported as abnormal by the transfusion centre. Of the 12 donors not referred, four either refused or failed to attend follow up appointments with the general practitioner and six had normal liver function values; lack of referral was in accordance with the centre's guidelines at the time. Liver biopsy was performed or pending in 11 cases. One donor had been considered for treatment with interferon alfa after the biopsy result.

The partners (all heterosexual) of 27 donors were tested. None of 14 male partners and one of 13 female partners was found to be infected, but details of possible shared risk factors for this partner were not available. Overall, general practitioners and donors indicated satisfaction with the counselling service at the transfusion centre. The main concerns expressed by donors were implications for sexual partners and for future offspring.

Comment

The positivity rate positive for antibodies to hepatitis C virus among first time donors at the North London Blood Transfusion Centre is one in 1400. Based on these figures, we should anticipate that 30 such asymptomatic subjects would be identified annually at the centre once the established donor panel had been screened.

This survey shows that, after counselling, 13 of 70 donors did not consult their general practitioner about their hepatitis C virus result. Of those who do, however, most are being referred to a specialist clinic

and numbers are likely to increase given that the current advice from the centre to general practitioners is to refer all donors irrespective of liver function values. All donors seen at hospital will need long term surveillance and many will have liver biopsies. The implications of hospital follow up should be considered. The donor becomes a "patient," subject to a burden of anxiety owing to the possibility of morbidity disclosed by screening for antibodies to hepatitis C virus and the inconvenience of regular hospital visits.[4] The financial burden of repeated attendance and monitoring should also be borne in mind. Conversely, screening may offer donors a beneficial service in terms of the early detection of possible clinically significant liver disease that might be ameliorated by treatment. Both financial and psychosocial factors need to be taken into account when assessing the cost effectiveness of the screening of blood donations and in planning resources for long term follow up of people identified as anti-HCV positive.

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2 Esteban JI, Gonzales A, Hernandez JM, Viladomiu L, Sanchez C, Juan C, *et al*. Evaluation of antibodies to hepatitis C virus in a study of transfusion-associated hepatitis. *N Engl J Med* 1990;323:1107-12.
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4 Managing patients with hepatitis C. *Drug Ther Bull* 1993;31:61-2.

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