

HEPATITIS C AND TRANSMISSION BY BLOOD AND BLOOD PRODUCTS

History

1 It has been known for several decades that Hepatitis could be transmitted by blood. In the early 1970's, test kits were developed which identified donors capable of transmitting Hepatitis B. However even when blood was screened by these methods, some recipients of blood and blood products continued to develop Hepatitis. Hepatitis A was excluded by testing in a few cases, but anyway this was considered to be transmissible only by the theca oral route anyway. This third type of Hepatitis was called non A non B Hepatitis. A test for this virus was developed in 1989, when the Hepatitis was called Hepatitis C.

2 The original tests were very poor, with only 16% positives being correct. The test has been improved considerably since then, and also confirmatory tests became available. The testing was considered by the Advisory Committee for Virological Safety of Blood (predecessor of the MSBT) and following their advice testing was introduced in the UK on 1 September 1991. Some other countries introduced the test earlier, but the ACVSP considered the deficiency in sensitivity and specificity to be too great.

Haemophilia

3 Prior to the mid 60's, haemophiliacs had a markedly reduced life expectancy, with 5% of severe haemophiliacs reaching the age of 40. From the mid 60's onwards, cryoprecipitate and later specific factor 8 and factor 9 were produced. Prior to the onset of AIDS in haemophiliacs, the life expectancy of haemophiliacs had almost reached the normal for western males.

4 The occurrence of Hepatitis C (then called non A non B) in haemophiliacs was recognised from the late 60's onwards. Paid donors has a higher incidence of Hepatitis C than did unpaid donors, and this was demonstrated by a lower incidence in haemophiliacs who were treated with individual donations of cryoprecipitate. However, where an individual had multiple treatment with cryoprecipitate (20 individual donations on each occasion), and later when specific factor 8 (from pools of donations of up to 20,000) it became obvious that all haemophiliacs would become infected.

5 Hepatitis C is particularly common among drug abusers in particular, and it was felt that these primarily contributed to the infection. In 1982 trials were started using some heat treated factor 8 to try to reduce the incidence of Hepatitis C. These early trials were only partially successful and so

the technique was dropped and was re-introduced in late 1984 to destroy HIV.

6 It is probable that all haemophiliacs who were treated before 1985 would have been infected with Hepatitis C. Since 1985, all factor 8 and factor 9 has been treated to destroy HIV and has also destroyed Hepatitis C. A very small number of haemophiliacs who have been treated with cryoprecipitate after 1985 and before September 1991 may have become infected with Hepatitis C.

Blood Transfusion

7 Blood transfusion recipients received individual donations, and because of the relatively low incidence of Hepatitis C in blood donors generally, only a small proportion will have become Hepatitis C infected. The first significant reduction in the risk of Hepatitis C transmission via blood was when in 1983 exclusion criteria were set up to reduce the risk of HIV transmission, prior to the availability of HIV screening tests. Among the exclusion categories were drug abusers and homosexuals. There have been several writs received by regional transfusion centres, which have primarily referred to the time between 1989 when HCV tests first became available and September 1991 when screening was introduced in the UK

Numbers Involved

8 In 1993 there were 5,400 haemophilia A patients and 1,100 haemophilia B patients registered with the haemophilia centres giving a total of 6,500. 1,300 are HIV positive. Approximately 800 are under 10 and so are unlikely to have had any treatment prior to 1985. This leaves a figure of 4,400 who in theory may be Hepatitis C positive but have been excluded under the HIV payment scheme. Only approximately half of the patients required treatment in any given year, and some have never been treated at all. At a guess this would leave approximately 3,000 individuals who are Hepatitis C positive but not HIV positive.

9 In 1993 there were 126 deaths in patients with haemophilia, of whom 59 died of AIDS and 12 died of liver disease. Of these 12 who are also HIV positive, and there is substantial evidence that patients with both HIV and HCV are more likely to go onto severe liver disease. The number dying of liver disease has increased over the last few years, and it is difficult to predict whether we have now reached a plateau.

10 The blood transfusion consultants committee on transmitted disease, suggest that 3,000 blood transfusion recipients are alive who are Hepatitis C positive. The Department has no better figures than this. This would give 6,000 individuals, and if they were to receive a payment similar to that made to HIV positive haemophiliacs and blood transfusion recipients, this would give a figure of £360 million at an average of £60,000 each. (The range is between £41,500 and £80,000).