NCIL OF EUROPE. (S. 019)

Docteur B. HADIDI 13

9.2 Hepatitis (Committee of Experts on Blood Transfusion).

9.2.1 Hepatitis B virus -

It was considered that there were no recent developments in studies of hepatitis B infection.

9.2.2 Hepatitis C virus

Dr. Gunson (United Kingdom) introduced this topic stating that whilst pilot trials of anti-HCV tests on blood donors have been undertaken, only Finland and France have introduced routine screening of blood donations.

Dr. J. Leikola (Finland) stated that in that country the prevalence of anti-HCV is 0.6% after initial screening and 0.5% after repetition of screen test. Approximately 0.3% are either positive or undeterminate in the blot test (RIBA). In a prospective study on open-heart surgery patients it was found, th presence of two strong bands in the Immunoblot (RIBA) (Ortho Diagnostics) concluded well with infectivity with blood unit (Lancet April 21, 1990). Prevalence of donors with two bands in RIBA is less than 0.1%. All donors with positive or undeterminate RIBA results are deferred for the time being, whilst those donors who are negative with the RIBA test are recalled for donations and the products from these donations are transfused.

Dr. Habibi (ISBT) stated that a significant proportion of anti-HCV positive donors have risk factors for hepatitis or other blood-transmissible diseases. A follow up of 48 donors at the French National Blood Transfusion Centre who had been found to be anti-HCV positive revealed a previously unknown history of intravenous drug use in 9, a former history of hepatitis in 12, and evidence of cirrhosis, chronic active hepatitis, or abnormal liver function tests in 11 donors. Similar data have been found in other centres in Spain and Australia. It would therefore be difficult, on purely ethical grounds, to continue to bleed such donors.

Other members of the Committee made comments regarding tests for anti-HCV as follows.

Australia has recently introduced routine anti-HCV screening and Dr. Schiff (Australia) reported an incidence of 0.25 - 0.5% repeatable positives Dr. Beal (League of Red Cross and Red Crescent Societies) reported that in the initial phase of HCV antibody screening in South Australia, the incidence of confirmed positives was around 0.6% in the first 13,000 donations tested. Some 25% of those found positive had abnormal liver function tests. The M : F ratio was 2:1, unlike the donor source ratio of 1:1. Results of clinical follow-up of these donors are not yet available.

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Dr. Hogman (Sweden) reported that in that country the incidence of anti-HCV positive repeat donors has been 0.3 - 0.5%. In new donors of the Capital area a frequency of 1.3% has been observed. Testing is not yet obligatory but is starting during 1990. Anti-HCV positive donors are deferred from further donation both of blood and plasma. No systematic look-back is performed.

Mrs. A. Hoppe (USA) related informed the Committee that the FDA licensed on 2 May 1990 the Ortho test for antibody to hepatitis C virus encoded antigens; approval of the Abbott test also is expected shortly. Routine testing of all blood products for transfusion began immediately following FDA approval of the test. Use of anti-HCV reactive plasma for fractionation will continue until the results of a fractionation experiment to document the safety of IGIV are available.

She raised the question of performing look-back programmes in patients who had received blood products derived from previous donations from an anti-HCV positive donation. She commented that such programmes often initiated litigation but this was difficult with hepatitis C because of the significant occurence of community-based infections. Unlike the situation with HIV infection Dr. Leikola (Finland) stated that in Finland there was no intention currently to institute look-back programmes and Dr. Habibi stated that in France a look-back programme was being undertaken in Paris on an investigational basis to compile scientific data.

The inclusion or exclusion of anti-HCV positive donations in plasma pools for fractionation produced conflicting opinions. Prof. Heiniger (Switzerland) considered the question regarding exclusion of anti-HCV positive donors was, presently, not resolved.

In Switzerland such donations will, for the time being, not be excluded from the plasma pool (source plasma) for fractionation, this is in line with the present policy of the FDA (USA). It is based on the excellent track record of IVIG worldwide and on specific safety studies conducted between 1986 and 1988. Concern is also expressed that an exclusion of these units may reduce the safety margin of IVIGs. Based upon further investigations this opinion may be changed .

Dr. P. Schiff (Australia) reported that in that country anti-HCV positive donations for F VIII (heated at 80° for 72 hrs), immunoglobulins (IM&IV) and albumin were accepted. This is an interim decision and will be reviewed after the U.S. study on IVIg safety in chimpanzees has been finalised.

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However, these opinions were not accepted by Dr. Habibi (ISBT) who stressed that opinions expressed in the HABIBI and GARRETTA's letter to Lancet (335-855-6 1990) engaged only the authors (i.e. neither France nor the ISBT). The publication of that letter was precisely designed to elicit discussion and decision on a national basis before reaching an international consensus.

The following are the main arguments selected amongst those developed in the above article in favour of testing for anti-HCV and excluding reactive plasma donations from the fractionation pools:

- based on available clinical and experimental data, in a highly significant number of cases anti-HCV coexist with the virus and reappears or is enhanced by the recurrence of HCV infections. The test, even at its present early developmental stage (C100-3 clone only), is therefore a reliable marker of infectivity and compares more appropriately with HBs Ag and anti-HIV markers than with anti-HBs which designates immunity rather than infectivity. The same screening-deferral policy should accordingly prevail.

- in Europe, the major source material for fractionation still remains "recovered plasma" from whole blood and quite a few plasma donors are whole blood or cytapheresis donors as well. Under these circumstances, if, as it seems to be the case, the policy of anti-HCV screening of blood donations in general is unanimously recommended in Europe, it would be practically difficult to promote a distinct policy for plasma donations exclusively.

- finally, there is no available evidence proving the inactivating potential of anti-HCV positive plasmas against HCV in fractionation pools, and the published data supporting the therapeutic efficacy of polyvalent immunoglobulins in preventing or treating non-A non-B hepatitis need reappraisal. Therefore, based on the available data, excluding anti-HCV positive plasma units is not likely to render fractionation products infectious. As for the therapeutic efficacy of immunoglobulins, the question remains open to investigation.

His view was supported by Dr.Leikola (Finland) who considered that confirmed anti-HCV positive units of plasma should be excluded from fractionation. Dr. Faber (Luxembourg) considered that the inclusion of such donations in source plasma for fractionation raised ethical issues.

Mrs. Hoppe (USA) reported that the FDA were currently undertaking a study in chimpanzees to assess the safety of I.V. Ig derived from plasma with or without the inclusion of anti-HCV positive plasma donations and the preliminary results may be available early in 1991.

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Consensus opinions

1. Routine screening of blood donations for anti-HCV will increase the safety of the blood supply. There are indications that a suitable confirmatory test for general use will be available soon.

2. It is recognised that not all units of blood or plasma which are anti-HCV positive with the screening tests presently available are infective for hepatitis C. Given the so far limited experience with the current tests, opinions differ concerning the exclusion of all HCV seropositive donations from source plasma for fractionation. Currently, further scientific evidence is being generated to resolve this problem.