0008

HEPATITIS WORKING PARTY REPORT (OCTOBER 1979) - APPENDIX I

Liver disease in Haemophiliacs - a progress report

According to the agreed protocol of Haemophilia Centre Directors Hepatitis Working Party, 179 patients with severe haemophilia A have been studied. The patients were given a general physical examination with particular attention to signs associated with liver diseases and medical history was taken regarding their general health and symptoms associated with chronic liver disease. Blood samples were collected at the interval of 3 to 6 months for liver function tests, HBs Ag, HBs ab, HA Ab and other viral studies.

The results of the medical history, physical examination and liver function tests were analysed. The asymptomatic patients with normal liver function tests at least on two consecutive occasions were dropped from regular follow-up and transferred to routine follow-up clinic when they will be checked at yearly intervals. Those patients were classified in 4 different groups depending on their AST level.

Group 1. Always normal
Group 2. Occasionally abnormal
Group 3. Persistantly abnormal (between 35 and 70 i.u./l)
Group 4. Persistantly abnormal (more than 70 i.u./l)

In the last two groups probably chronic liver disease was suspected. 32 of these groups had been seen at the Liver Clinic by Dr. Trowell where the possibility of a chronic liver disease was evaluated.

Results

In spite of multiple transfusions and large numbers of grossly abnormal liver function tests, very few patients showed any stigmata of chronic liver disease. 14 of these patients (7.8%) had palpable spleen. 3 had spider nevi and only one had gynaecomastia of any significance and though total protein was raised in more than 10% of cases, the albumin globulin ratio was maintained in all but 8 cases.

As discussed earlier, patients were classified into 4 different groups on the basis of their AST level (table 1)

Table 1.

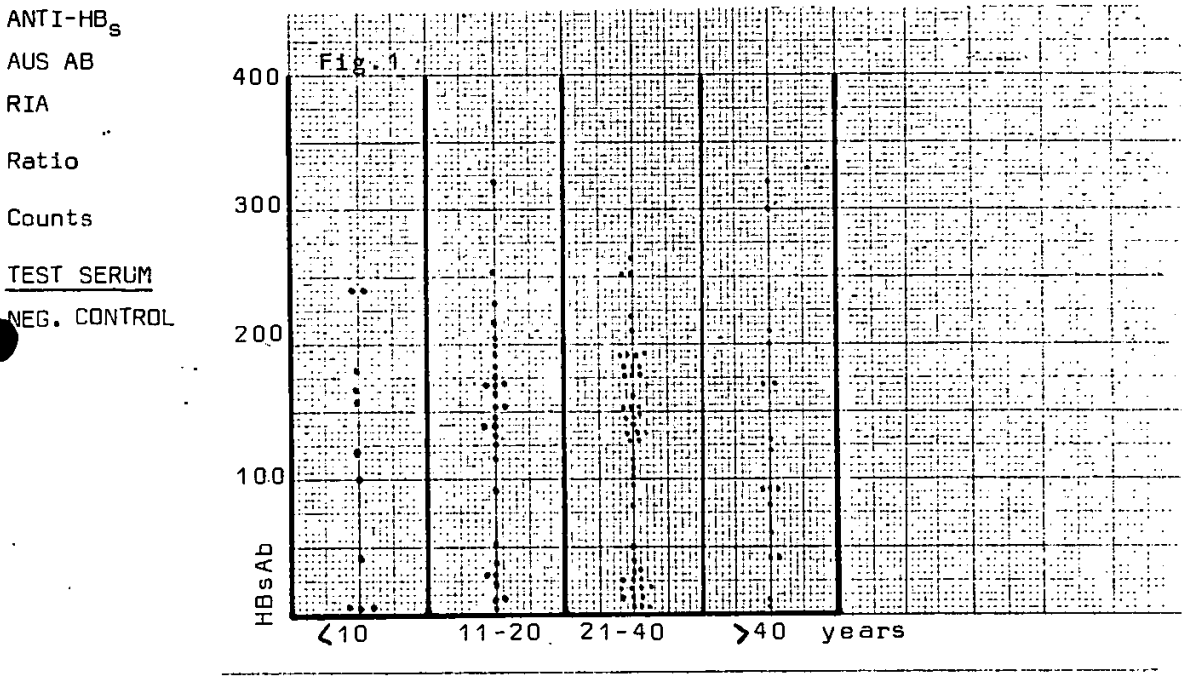
	No. of patients.	Percent
Group 1.	41	23.6
Group 2.	63	36.2
Group 3.	47	27.0
Group 4.	23	13.2

(40.2%)

70 out of 174 patients, for whom details liver function tests were available, had persistantly abnormal liver function tests. 32 of these have been seen at the Liver Clinic and 20 of them (62.5%) most probably had significant chronic liver disease as judged by their clinical features and further investigations like proteins and BSP retention.

During this period of study (March, 1978 to August, 1979) 7 of these patients (3.9%) developed overt jaundice and 2 of these (28%) were HBs Ag positive. In 6 out of 7 cases the liver function tests rapidly returned to normal and pre-jaundice level. The other one required treatment with contico steroid for persistantly abnormal liver function and symptoms of chronic liver disease.

88 out of 107 patients studied had evidence of past infection with Hepatitis B (82.2%). Prevalence of HBs Ab increased from 75% (8 out of 10 tested) in the 6 - 10 year age group to 93.75% in the 31 - 40 year age group though there was no significant difference in HBs Ab level in different age group. Fig. 1.



Only two of these patients were known carriers of HBs Ag. There was no significant difference in liver function test between those with high level of HBs Ab and those negative for HBs Ab or with a low level of HBs Ab. (Table 2.)

Table 2.

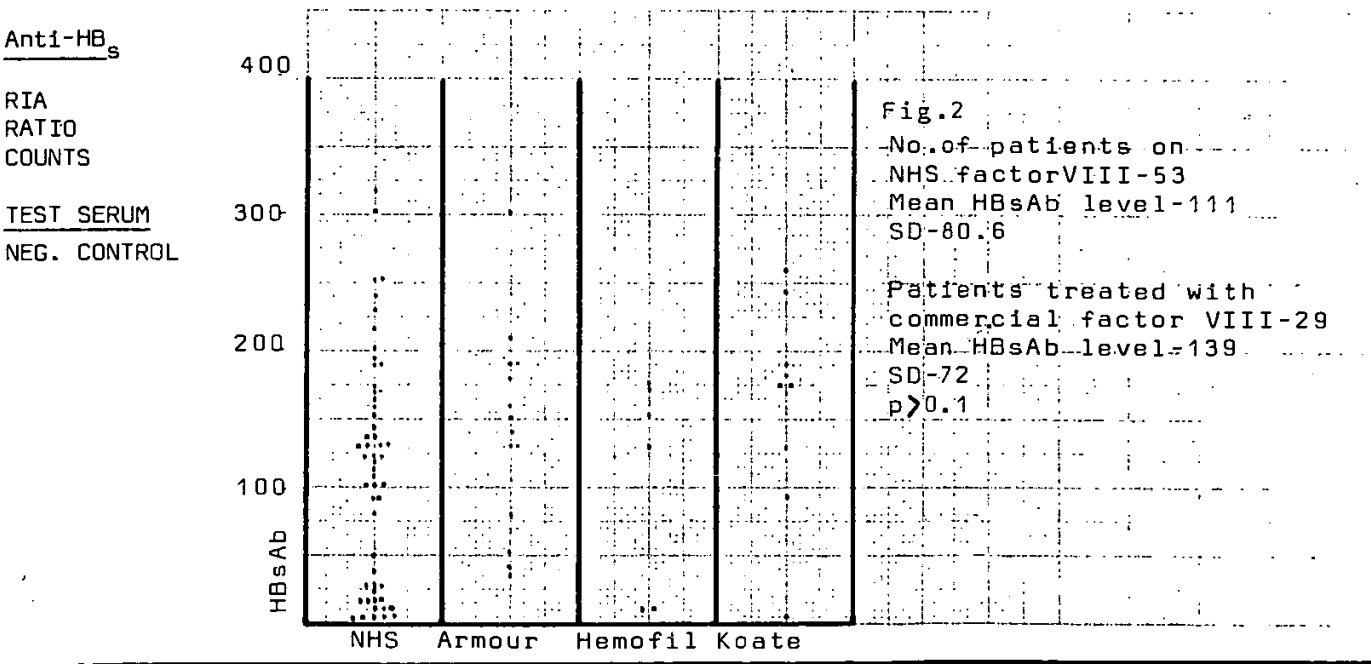
	Liver function				
	Group 1.	Group 2.	Group 3.	Group 4.	Total
HBs Ab Ratio >20	15 (19%)	32 (40.5%)	25 (31.6%)	7 (8.9%)	79
HBs Ab Ratio <20 or negative	5 (20%)	14 (56%)	2 (8%)	4 (16%)	25

Patients treated with N.H.S. and Commercial factor VIII concentrate showed no significant difference in their liver function tests (table 3).

Table 3

	Liver function				
	Group 1.	Group 2.	Group 3.	Group 4.	Total
N.H.S. factor VIII	25 (30%)	28 (33%)	22 (26%)	9 (11%)	84
Commercial Factor VIII	12 (32%)	10 (27%)	11 (30%)	4 (11%)	37

The patients treated with different types of factor VIII (N.H.S. and Commercial) showed no significant differences in their HBs Ab level. (Fig. 2)



but HBs Ab level showed an inverse relation with the time interval between the last dose of factor VIII and the day on which the sample was taken (fig. 3).