FOUR YEARS' FOLLOW-UP STUDY OF LIVER FUNCTION OF HAEMOPHILIACS. F. Panicucci, U. Baicchi and A. Sagripanti. Haemophilia Centre, St. Chiara Hospital, University of Pisa, Pisa, Italy.

By physical and biochemical examinations 112 patients with severe haemophilia A or B and 24 with mild to moderate forms were studied to determine the incidence of liver damage, which may have resulted from commercial concentrate therapy.

Data of the follow-up study during a period of 4 years showed transiently elevated values of SGOT and SGPT in 100 patients, persistently elevated values in 14 and normal values in 22 patients. Test for hepatitis B antigen was positive in 9 patients. Hepatomegaly, splenomegaly or both were found in 15 patients. Acute hepatitis with jaundice was reported by 23 patients, 17 of whom still showed abnormal enzyme tests. Chronic active hepatitis was very strongly suggested in 5 patients, who on repeated occasions showed, in addition to elevated SGOT and SGPT, abnormal values of serum albumins, immunoglobulins, alkaline phosphatase and Normotest. The majority of patients were free from clinical liver disease.

SIGNIFICANCE OF ABNORMAL LIVER FUNCTION TESTS IN HEMOPHILIACS: A FOLLOW-UP STUDY, P.M. Mannucci, Z.M. Ruggeri, A. Capitanio, F. Pareti. International Training Ctr. Angelo Bianchi Bonomi, Univ. of Milano, Italy.

It was previously shown (1) that hemophiliacs have a high incidence of abnormal liver function tests unaccompanied by clinical evidence of illness. Since single measurements are of little use to access the significance of such abnormalities and their possible relationship with chronic hepatitis, hemophiliacs with abnormal liver function tests were regularly followed with measurements carried out at least once a year. 20 patients with raised SGOT-SGPT were followed for up to 3 years; in 9, the abnormalities persisted throughout the whole observation period, whereas in 2 the enzymes were occasionally increased and in 9 they were always normal since the initial abnormal measurement. Out of 39 patients with increased serum gamma-globulins, abnormal values were persistently observed in 11 followed for 3 years. In 28 patients followed for 2 years, persistently abnormal values were found in 21, whereas in 7 normal values were invariably found since the initial abnormal measurement. These findings show that liver function tests are persistently abnormal in a number of patients; in these, biopsy should be considered in order to undertake suitable therapeutic measures.

(1) J. Clin. Path. 28, 620, 1975

ANALYSIS OF BLEEDING FREQUENCY IN HEMOPHILIA. E.W. Lovrien, S. Underwood, J. Hammerling, M. Rivas and J. Elder. University of Oregon Health Science Center, Portland, Oregon, U.S.A.

Patients receiving AHF by home infusion therapy completed a form at the time of each infusion which allowed an accurate appraisal of bleeding frequency by site. A simple data management system was used to analyze the pattern of bleeding in 86 patients who averaged 28 months on the program with an age range from 2 to 52 years. The mean age was 17.1 years. The number of bleeds divided by the number of months = bleed per month index (BMI). The composite BMI for all 86 patients = 4.765 with a total of 11,504 recorded bleeds. 20% occurred in the head and neck, chest and abdomen = 16.66%, buttock and G.U. = 11.65%, upper extremity = 22.02%, lower extremity = 26.37% and miscellaneous = 3.30%. Extremities accounted for 48.39%. The most common bleeding sight was the abdomen 14.7166%, 2nd = nose 12.03%, 3rd = R lower leg = 10.68%. In the upper extremity, 15.76% were right sided compared to 6.25% left; lower = 23.34% right, 3.03% left. The knees accounted for only 1.113% of all the bleeds. The highest BMI on a patient = 12.4 avg. bleeds per month over 4 years.

The patients were divided into age categories of 3 years. The highest BMI for R. lower leg was age 6-9; R. knee age 12-15; abdomen 15-18, but high in all age ranges. Urinary bleeding was highest in early childhood in 0-3, 3-6, 6-9, and 9-12 year olds. By careful observation of the BMI, the management of early bleeding to prevent deformity should be enhanced. A high BMI may be used to guide prophylactic infusion. This study has demonstrated that a simple data processing system is useful in directing infusion therapy to minimize deformity.