TREATMENT OF JOINT-BLEEDINGS IN HEMOPHILIACS WITH ANTIBODIES TO FACTOR VIII WITH HIGH DOSES OF FRACTION FEIBA. Kl. Schimpf, K. Zimmermann, and P. Zeltsch. Rehabilitation Hospital and Hemophilia Center Heidelberg, Rehabilitation Foundation, Heidelberg, West-Germany.

Observations in 3 patients demonstrated, that joint-bleedings can be controlled with high doses of fraction FEIBA alone or in combination with factor (f) VIII on out-patient basis. First patient, inhibitor 5-10 units (u) per ml, suffered from 24 joint-bleedings within 392 days. 20 of them could be stopped by a single injection of 150-200 u of fraction FEIBA per kg bodyweight (bw). A combination of 90 u of FEIBA and 36 u of f VIII per kg bw had the same effect. But after 5 injections of this combination within 6 weeks, the inhibitor level had risen from 10 to 240 u per ml. During further treatment with 180 u of fraction FEIBA without addition of f VIII, the inhibitor fell down with a halflife time of 50 days. The clinical effect of fraction FEIBA was not influenced by the elevated antibody level. Two further patients, inhibitors 2-4 and 32 u respectively, obtained combined injections of 50-100 u of FEIBA plus 36-42 u of f VIII. One patient was on a prophylaxis of 3 injections weekly for 193 days. After 57 injections the inhibitor had fallen from 2-4 u to unmeasurable values. The third patient obtained the above mentioned dosis twice a day for treatment of a knee joint effusion. After 1 week the inhibitor was diminished from 32 to 13 u.

THE SUCCESSFUL TREATMENT OF ACQUIRED INHIBITORS AGAINST FACTOR VIII.

H.-H. Brackmann, F. Etzel, P. Hofmann and H. F. Li. Institute of Experimental Haematology and Blood Transfusion of the University of Bonn, W. Germany.

From the 582 inhibitor tested hemophilia A patients 19 were found to have an inhibitor against factor VIII. In 2 years of study the observation has been made, that a specific therapy combination of an activated prothrombin complex (Fraction Feiba) with high dosages of factor VIII concentrate can reduce the inhibitor titer to zero. A modified method of Bethesda was used for the detection of inhibitors. An inhibitor concentration of 1 U/ml was determined when the patients plasma inactivated 75 % of that activity of factor VIII in the incubation mixture after the incubation time at 37° C. The combination therapy dosages for Fraction Feiba range from 30 to 120 U/kg bodyweight and for factor VIII concentrate from 40 to 150 U/kg bodyweight. The dosages are given 2 to 3 times a day in cases of acute bleeding episodes, and 3-7 times a week during regular prophylactic treatment to remove the inhibitor. In 11 of our 19 inhibitor patients, the inhibitor titer was reduced to zero on the basis of this combination therapy. High and low responders were recorded, the highest response being 147 U/ml. The remaining (8) patients are still undergoing treatment with this procedure.

SGOT ELEVATIONS AND HEPATITIS B INFECTIONS IN HEMOPHILIACS. E. Eyster, J. Haverstick and S. Plotkin Penn State Univ. Coll. of Med., Hershey, Pa., and the Wistar Institute, Philadelphia, Pa., U.S.A.

SGOT, Hepatitis B surface antigen (Ag) and antibody (Ab) were performed at yearly or twice yearly intervals for 1-2 years on 75 hemophiliacs receiving an average of 40,000 Factor VIII units per patient per year. Of 42 receiving >10,000 VIII units on 5 or more days per year, 38 (90%) had SGOT elevations. In 30 (71%), abnormalities were recurrent. Of 33 receiving less Factor VIII, only 10 (30%) had recurrent SGOT elevations; all 10 had either Ab or persistent Ag.

Fifteen patients received only cryoprecipitate. In 3/5 receiving >50 bags on 5 or more days per year, SGOT elevations persisted; one had persistent Ag and one had Ab. None of the 10 receiving less cryo had persistent SGOT elevations; 5 had Ab.

Sixty-three (84%) were Ab pos. Recurrent SGOT elevations were seen in 35/63 (55%), including 7 with Ab titers >1000. Seven patients were Ab neg; none had an ↑ SGOT. All but one with agammaglobulinemia had received <50 transfusions per lifetime and <5000 VIII units on <3 days that year. Five of the 7 had received only cryo. Five patients (6%) were persistently Ag pos; all had persistent SGOT elevations.

It was concluded that SGOT elevations in hemophiliacs were related to the frequency and intensity of Factor VIII infusions, and were regularly seen in patients receiving >10,000 VIII units or >50 bags of cryo on 5 or more days per year. Patients with Ab frequently had SGOT elevations while those with no Ab usually did not. Ab (or Ag) was found in 58/60 patients who received concentrate compared to 10/15 who received cryo only (p <.005).