Time 16.00 cont.

0629 THE CLINICAL USE OF ANTI-THROMBIN III

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Thrombosis caused by inherited deficiency of anti-thrombin III (At III) was first described in a Norwegian family by Egeberg (1965). There are numerous reports on reduced At III concentrations in disease states, including acute venous thrombosis, disseminated intravascular coagulation, in postoperative patients and women taking oral contraceptives, as well as those receiving heparin therapy. To what extent these findings reflect a causal relationship between At III deficiency remains unclear. However, the possibilities now exist of administering purified At III to p tients who are deficient in it, although no clear guide-lines yet exist on the clinical usefulness of replacement therapy with At III. Patients who undergo a major operation with low At III activity should probably be considered at very high risk of developing postoperative DVT. Four such patients, who had At III levels of less than 50% before surgery received an infusion of either 1500 or 1000 units of purified At III concentration; kinetic studies in these indicated that a single infusion will produce an effect which would last up to 36 hours. 50 patients undergoing total hip replacement were randomly allocated to receive either At III or identical placebo infusion in addition to low dose heparin prophylaxis. At III has also been administered to patients who failed to respond to full doses of hep rin therapy, those suffering from chronic thromboembolic hypertension or congenital deficiency of At III. The results of these studies will be presented and their clinical implications discussed.

0630 SEROLOGIC MARKERS OF HEPATITIS VIRUSES IN HEMOPHILIACS

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To determine and compare the risks of exposure to hepatitis A and B viruses in patients with hemophilia A receiving intravenous replacement therapy, sera from 138 patients, ages 9 months to 67 years, were studied. Sera from all 138, exposed to either cryoprecipitate (Cryo) or antihemophilic factor (AHF) concentrates for periods ranging from a few months to 15 years were tested for hepatitis B surface antigen and antibody by radioimmunoassay, for antibody to the hepatitis B core antigen by complement fixation and radioimmunoassay, and for antibody to hepatitis A virus by immune adherence hemagglutination. Serologic evidence of past or present hepatitis B was detected in 88.4 percent, while 29.7 percent had evidence of past infection by the hepatitis A virus. The former prevalence is consistent with the known high frequency of exposure to hepatitis B in hemophiliacs as a result of replacement therapy. The latter prevalence, similar to prevalences of antibody to hepatitis A virus seen in populations lacking parenteral exposure to blood products or plasma derivatives, was unrelated to the degree of exposure to Cryo or AHF concentrate. These findings confirm that hepatitis A unlike hepatitis B, is infrequently transmitted by Cryo or AHF concentrate.

0631 USE OF AN ACTIVATED PROTHROMBIN COMPLEX CONCENTRATE (AUTO FACTOR IX-HYLAND) IN THE CONTROL OF BLEEDING OF HAEMOPHILIC (A) PATIENTS WITH INHIBITOR OF FACTOR VIII.

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One of us (C.F.A.) has previously reported the successful use of one of the commercially available prothrombin complex concentrates for the control of bleeding episodes of haemophilic patients with factor VIII inhibitors. Subsequent batches of these concentrates have not proved consistently effective even in doses of 150 factor IX units/kg every 24 hours. Recently an investigational preparation, Auto Factor IX, has been made available to us. This has a stated factor VIII correctional unit assay for each batch, (based on the ability to correct the prolonged APTT of plasma containing an inhibitor of factor VIII).We used 60-120 units/kg as an IV dose every 12 or 24 hours in the treatment of 24 bleeding episodes in 8 patients with factor VIII inhibitor. The bleeding episodes were haemarthrosis (12) soft-tissue (6) intralingual (2) lacerations (2) retroperitoneal (1) and epidural (1). Rapid easing of pain and reduction of swelling was noted in all joints and soft tissue bleeds. In the retroperitoneal bleed cessation of bleeding was demonstrated by Technetium 99 Sulfur-colloid flow study, in the patient with epidural bleeding the hematoma was shown to reduce by serial CAT scans. Response was as good as we have come to expect from similar levels of factor VIII concentrate given to patients without an inhibitor. In 23 of the 24 episodes there was a marked reduction of APTT 10 minutes after the completion of the infusion.