

and antithrombin III as assessed by immunological techniques. The activity of the partially purified plasma activator preparations was markedly more stable at 37° C than the original plasma, was stable at 4° C for several days, and withstood heating at 56° C for 1 hour. The activity was inhibited by exposure to phenylmethyl sulphonyl-fluoride, but not by tosyl-L-lysine chloromethyl ketone or iodoacetamide.

C. Kluft (Gaubius Institute, Health Research Organization TNO, Herenstraat 5d, Leiden, The Netherlands): **C1-Inactivator as a Determining Factor in Contact Activation of Fibrinolysis.** (333)

The rate of contact activation of fibrinolysis is considered to reflect the activation rate of proactivator and Hageman factor. This study was undertaken to determine the role of C1-inactivator in this process.

Contact activation of fibrinolysis was performed according to Ogston et al. (1969), *J. Clin. Invest.* 48, 1786-1801. The rate of activity generation was measured in plasma with various levels of C1-inactivator and appeared to be dependent on that level; i.e., a high level of C1-inactivator corresponds with a slow rate of activity generation.

It has recently been demonstrated that the fibrinolytic activity of euglobulin fractions is strongly inhibited by C1-inactivator also present in this fraction. The activity generation of contact activation is found to be accompanied by a gradual decrease in functional C1-inactivator in the euglobulin fraction. The fibrinolytic activity is set free by this disappearance of inhibition.

It is concluded that the rate of contact activation of fibrinolysis must be interpreted in terms of the inactivation of C1-inactivator rather than of the activation of proenzymes. All enzymes capable of inactivating C1-inactivator can contribute to the process of contact activation of fibrinolysis. This mechanism might account for the observed defects in fibrinolysis in vitro in Fletcher Factor deficient patients.

R. Pflugshaupt, S. Moser, K. Züger and R. Büttler (Central laboratory, Blood Transfusion Service SRC, CH-3000 Berne 22, Switzerland): **Comparative Investigations on Factor VIII Assays.** (334)

Six one stage methods and one two stage method were tested for precision and reproducibility. With each method twenty calibration curves of normal plasma and two lots of Factor VIII concentrates were established. Statistical evaluation revealed only minor differences. Neither one of the methods was optimal for both the physiological-pathological region and the region of high activity preparations.

Three selected methods were tested in vivo for accuracy: nine patients with hemophilia A were treated with equal amounts of Factor VIII concentrates or kryoprecipitates respectively. The methods showed different activities for preparations as well as for patient's plasma. The discrepancy between measured and expected recovery differed for each method.

M. Ekberg, I. M. Nilsson and U. Hedner (Coagulation Laboratory, Allmänna Sjukhuset, Malmö, Sweden): **Prognostic Value of Factor VIII in Glomerulonephritis.** (335)

Factor VIII and factor VIII related antigen were determined in 116 patients with early glomerulonephritis (< 6 months duration) without impairment of renal function. Other coagulation and fibrinolytic components and acute phase reactants were also determined. The patients were followed for up to four years with respect to both coagulation pattern and renal function. It was found that the values for factor VIII and factor VIII related antigen were initially normal in those who made a complete recovery during follow-up but high in those who developed persistent renal damage. The other coagulation factors and the acute phase reactants were of no prognostic significance. Factor VIII related antigen has been shown to be synthesised in the vessel intima. The initial factor VIII level in early glomerulonephritis may reflect the degree of vascular engagement of the glomeruli. The high factor VIII levels, especially factor VIII related antigen, may be of significance in the development of fibrin deposits in glomeruli.