FIBRINOLYTIC RESPONSE IN RETINAL VEIN OCCLUSION AND DIABETIC RETINOPATHY. V. De Rosa, M. Peduzzi, F. Montanari, S. Coccheri. Department Angiology and Blood Coagulation of the Regional Hospitals, Bologna, and Ophthalmology Clinic of the University of Modena, Italy.

Coagulation and fibrinolysis studies were performed in 40 patients during the second week after occurrence of Retinal Vein Occlusion (RVO), in 35 patients with Diabetic Retinopathy of various degree and no thrombosis (DR), and in an age-sex matched control group.

Euglobulin Lysis Time was markedly prolonged in 30% of RVO and in 44% of DR patients. Poor responders to venous stasis ranked around 35% in both groups. Urokinase inhibition was increased in one third of RVO and in about two thirds of DR patients. These and other findings like increase of Factor VIII or platelet aggregation were only seldom associated in the same subjects.

Decreased plasma or tissue fibrinolysis is a frequent finding both in RVO and in DR and trials with drugs inducing a sustained increase of fibrinolytic activity are therefore justified in these conditions.

SOME PLATELET FUNCTION TESTS NORMALIZED BY ICI 55,897 AND CLOFIBRATE. J.R. O'Brien, M.D. Etherington, Sandra Jamieson and R. Shuttleworth. Portsmouth & South East Hampshire District Pathology Service, Portsmouth, Hampshire, England.

We have shown (Lancet, 2, 995, 1976) that in normal men a diet substituting linoleic acid for most of the normal saturated fat intake is followed by marked changes in some of those platelet function tests which are abnormal in the prothrombotic state. Are these changes due to alterations in the plasma lipids?

Clofibrate (Atromid-S) and an analogue, ICI 55,897, were given in double blind cross over studies to respectively 10 and 19 patients with severe peripheral arterial disease and/or a past history of MI. Preliminary analysis indicates that in 3 weeks on 55,897 the mean heparin thrombin clotting time was normalized from 25 seconds pre-treatment to 30 seconds. The fibrinogen decreased from a mean of 371 to 332 mg/%, but this treatment had no effect on the anti-thrombic activity and no effect on the plasma lipids. In the Clofibrate study the lipids and the anti-thrombic activity decreased; the HTCT was probably ameliorated but a marked placebo effect confounded the statistical analysis. However, clinical records of patients to be presented strongly support these conclusions. Thus no simple single mechanism, e.g. a change in lipids, can account for the changes achieved. These observations, however, establish that these tests regularly found to be abnormal in groups of patients at risk of further thrombosis can be changed towards normal in patients by two ICI compounds. It is now vital to find out if these changes are beneficial to the patient.

SENSITIVITY OF THROMBOPLASTINS. R. Altman, J. Rouvier and G. Mosquera. U.A.M.I. Rivadavia-Peralta Ramos, Departamento de Investigación, Buenos Aires, Argentina.

Using dilutions 1/1-1/16 of different thromboplastins and undiluted plasma, the prothrombin times were longer with the increase of dilutions. When plasma was diluted in saline or buffer (1/5, 1/10), a proportional shortness of the clotting times were observed. With adsorbed plasma as diluent a progressive lengthening of the prothrombin times were obtained, related with the clotting times of the undiluted plasmas. Express as ratios, all thromboplastins showed shortness when plasma was diluted with saline or buffer but rather constant values with adsorbed plasma dilutions. Then, thromboplastins were concentrated and, although times of undiluted plasmas were rather similar, the ratios of the different concentrations of tissue extract, considering the 1/10 dilution of plasma, were different. In terms of the so called "sensitivity" this means a better sensitivity when thromboplastin concentration was increased. Similar results were achieved when thromboplastin was additionated with fenol. We concluded that many tissue extracts may achieve a "good sensitivity" by increasing its concentration in the test tube. Why plasmas diluted with adsorbed plasma gives constant ratios, remains unknown for us. We feel that standardization of thromboplastin should be made on more biochemical basis.