IMMUNOELECTROCATAPHORESIS OF FIBRINOGEN: A NEW METHOD APPLIED TO THE DETECTION OF FIBRINOGEN ELECTROPHORETIC ABNORMALITIES. G. Ruíz-Reyes, N. Landero de Ruíz and T. Armenta-Olvera. Laboratorios Clínicos de Puebla, Puebla. México.

Migration of fibrinogen in an electric field is useful to separate abnormal fibrinogens in those which migrate normally, anodally of cathodally. Using the conventional immunoelectrophoresis technic of plasma, the distinction between normal mobilities and the slightly abnormal ones is not easy to establish in some cases. After electrophoresis of plasma in agar gel, a very clear visualization of the fibrinogen motility is obtained by precipitation of the protein with a monoespecific antiserum applied to the gel surface in cellulose acetate strips. The name of "immunoelectrocataphoresis" is proposed to call the method (from the greek cata=downward) considering that this denomination describes clearly the basic principle involved in the procedure and the descending direction of the antibody to meet and precipitate with the antigen. It is faster and cheaper than the conventional immunoelectrophoretic technique and can be easily incorporated into routine laboratory work. The method can be applied to study the fibrinogen motility of hereditary or acquired cases of dysfibrinogenemias.

NATURAL PLASMA INHIBITORS IN INDIVIDUALS WITH HIGH RISK FOR THROMBOTIC DISEASE. Araceli M. Engel. Feuerman Laboratory of Thrombosis, Fundación CIMAE, Buenos Aires, Argentina.

Our modification of the assay for the inhibitor of factor Stuart activated (Anti-$X_a$) was evaluated together with the antiactivator of plasminogen (Antiplasm.) and the nature of the fibrinogen degradation products (FDP) as a test of the risk for thrombotic disorders. Thirty patients with acute myocardial infarction (AMI), twenty eight in the chronic phase (CMI) and thirty healthy controls (C) were studied. The age range for the three groups was 45-85 with a mean age of 57-62. The activity of Anti-$X_a$ in C was 46.7 U/ml (± SD 11.5); 31.5 U/ml (± SD 16.5) with $p<0.001$ for the AMI group and 42.1 U/ml (± SD 17.9) for the CMI group. Very high activity for Antiplasm. in the AMI group was found (11 min ± SD 7.1) with $p<0.001$ for a C value of 3 min 36 sec (± SD 1.2). For the CMI group the value was 6 min 11 sec (± SD 3.3) and $p<0.001$. The FDP were elevated in the AMI group with a mean value of 15.5 polimerization inhibition units (PIU/ml) being 0 PIU/ml the C value. The CMI group had a mean value of 4.3 PIU/ml. The ratio between PIU/ml and µg/ml of the FDP indicated products of "early" nature in AMI and "late" type in CMI. The findings mentioned above were similar when the patients received anticoagulants except for the nature of FDP that was changed to the "late" type in both groups. The simultaneous determination of Anti-$X_a$, Antiplasm. and the nature of the FDP can be applied to other pathologies. The comparison of these parameters may indicate the oncoming of an acute thrombotic episode and can be useful in evaluating the status of the cardiovascular system during cardiac rehabilitation.

PROCOAGULANT ACTIVITY OF THROMBOSTHENIN PREPARATIONS. L. Muszbek, L. Fésüs, T. Szabó and J. Hársfalvi. Department of Pathophysiology and Central Research Laboratory, University School of Medicine, Debrecen, Hungary.

3 x precipitated bovine thrombosthenin preparation exerted a powerful procoagulant effect similar to platelet factor 3 activity. In the presence of thrombosthenin the recalcification time, the kaolin clotting time and the Stypven time considerably shortened, the partial thromboplastin time only slightly altered and the activated partial thromboplastin time did not change at all. Thrombosthenin highly accelerated the generation of intrinsic thromboplastin but it was not active in a factor IXa generation test. It neither possessed tissue factor like property nor influenced the activity of tissue factor preparation or the action of thrombin on purified fibrinogen. Thrombosthenin contained 109 µg phospholipid/mg protein, the composition of which was quantitatively determined by thin layer chromatography. The procoagulant activity as well as the phospholipid content were retained after agarose gel filtration. It is suggested that thrombosthenin having an associated phospholipid component significantly contributes to the clot promoting effect of activated platelets.