1059 COLD PROMOTED ACTIVATION OF FACTOR VII(CPA) AND, PLASMA RENIN ACTIVITY (PRA)

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van Royen, K. Hoekman, P. Elte and A. Schell Amsterdam, The Netherlands. and A. Schellekens; University Hospital Wilhelmina Gasthuis, Amsterdam,

The CPA phenomenon occurs in about 20% of the population, 60% of women using contraceptive drugs and 90% of pregnant women. Cpa positive plasma samples show at 4°C spontaneous activation of prekallikrein and factor VII, shortening of the Thrombotest Time (TT) and consumption of C4 esterase Since kallikrein may activate prorenin, we related the CPA inhibitor. phenomenon to PRA.

A highly significant correlation was found between the shortening of the TT at 4°C and an increase in PRA during storage of random plasma samples.

It is concluded that special care should be taken when PRA is determined in CPA positive plasma samples in order to avoid erroneously high PRA levels.

ACQUIRED INHIBITORS OF BLOOD COAGULATION IN NON HAEMOPHILIAC PATIENTS. 1060 J.H.Roussi*, L.L.Houbouyan, J.Delemme, A.F.Goguel, Department of Haematology, Hospital Ambroise Paré, 92100 Boulogne, FRANCE.

We report here a study concerning 25 cases of acquired inhibitors of blood coagulation observed in our hospital over the last 3 years. According to their mode of action, these anticoagulants could be divided into 2 groups : only 2 natients plasmas had an elective ef-fect on anti-haemophilic A factor (AHF), the 23 other inhibitors "luous-like" were directed against the "Prothrombin activator complex" of factors Xa, V, and phospholipid and mainly against the phospholipid. These antibodies generally occurred in elderly patients (older than 60 years) but 8 patients were between 15 and 30. Most were women; 13 inhibitors were associated with underlying diseases, well known to induce such abnormality (SLE, neoplasmic disease, poly-arthritis, auto-immune haemolysis). If the 2 AHF antibodies induced severe bleeding manifestations, on the other hand, the "lupus-like" inhibitors were generally clinically asymptomatic. These inhibitors have been particularly studied according to their immunological properties by several technics : immuno-neutralization, isolation of immunofollowed by complex dissociation. Their specificity was IgG and/or IgM for the "lubus-like" anticoagulants, IgG k for one anti-AHF. The great majority of these inhibitors was still present all over the 3 years follow-up despite of Prednisone treatment for those associated with an underlying disease; the anti-AHF (70 Oxford U.) was successfully treated by Prednisone and Azathioprine. The knowledge of such acquired inhibitors might lead to a further approach in the concept of immune response in man.

1061 CROTALASE AND THROMBIN: COHOMOLOGY OF AMINO ACID SEQUENCES AS EVIDENCE FOR A COMMON ANCESTRAL GENE

Hubert Pirkle, Francis S. Markland, Jr., Ida Theodor, and Richard Baumgartner, Depart-ment of Pathology, University of California, Irvine and Department of Biochemistry and Cancer Research Institute, University of Southern California, Los Angeles, Calif., U.S.A.

Crotalase is a coagulant enzyme from the venom of C. adamanteus which releases specifically fibrinopeptide A from fibrinogen and cleaves the single thrombin-vulnerable bond of prothrombin. Edman degradation of crotalase yielded a six-step N-terminal sequence which contained only one residue in common with the N-terminal sequence of the B-chain of thrombin (Magnusson; Thompson et al.). When the two sequences were compared with the N-terminal sequences of the heavy chains of factor IXa (Enfield) and factor Xa (Titani), extensive identity was noted in five of the six positions, indicating evolutionary relationship among the four proteins and the suitability of the crotalase molecule for structure-function studies of thrombin-like actions. Our method for demonstrating that croevolutionarily related is

rotalase	Val Ile Gly Gly Asp Glu	novel and is termed cohomology. We regard two
actor IXa	Val Val Gly Gly Glu Asp	amino acid sequences to be cohomologous when they
actor Xa	Ile Val Gly Gly Arg Asp	each exhibit appreciable similarity to one or more
hrombin	Ile Val Glu Gly Ser Asp	different sequences but not to each other. We hav
		al terent sequences but not to each other: he had

found that this approach to the determination of evolutionary relationship, while employed intuitively here, is amenable to rigorous mathematical formulation (to be published).

We have