

PRELIMINARY RESULTS ON THE DISCONTINUOUS LONG-TERM ADMINISTRATION OF SUBCUTANEOUS CALCIUM-HEPARIN TO ARTERITIC PATIENTS. A PHARMACOLOGICAL ACTION HYPOTHESIS. C. Raby, H. Bertrand. Department of Bioclinical Research, Institut Choay, Paris, France.

Thirty five patients with severe evolutive arteriopathy were selected since following the advent of their first accident and although they received classical treatment they experienced at least one or sometimes several relapses of thrombosis. These patients were subjected to discontinuous subcutaneous ambulatory heparin treatment. This treatment consisted of two daily injections of 5,000-10,000 IU calcium-heparin (Calciparine) depending on each patient's weight, during 30 days every three months. A backward survey of nine years for the patients first treated and of over two years for those most recently examined indicated that such patients never underwent recurrence of the disease and were considerably functionally improved. Experimentally in the animal and after subcutaneous injection of low doses of using ^{35}S labeled heparin we have shown that heparin remains bound both on arterial and venous endothelium at least 15 hours after all anticoagulant activity has disappeared from circulating blood. As a rule and depending on individuals the relationship between the dose and the persistence of heparin bound on the wall is much more constant than that existing between the dose and the duration of the anticoagulant effect. Low doses (100-150 IU/kg in man) repeated twice a day will suffice to ensure the persistence of an endothelial coating. This coating could account for the excellent clinical results obtained.

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DIAGNOSIS AND TREATMENT/CONTROL OF CONSUMPTION COAGULOPATHY USING THROMBELASTOGRAPHY (TEG). C. Raby. Department of Bioclinical Research, Institut Choay, Paris, France.

The amplitude (Emx) of a whole-blood TEG (thrombelastogram) tracing stems from three factors : platelets, fibrinogen and factor XIII. These factors are the first defective in a consumption coagulopathy process. Consequently the amplitude is reduced. In contrast, because of a circulating thromboplastin activity which triggers this process, the "r" parameter is modified much more slowly. Such a paradoxical dissociation of the tracings' elements characterizes an early stage of DIC. In a later stage "r" increases and the tracings indicate that of a mixed hypocoagulability without any specific character. A transfer test in which the "r" parameter of an isogroup normal plasma is compared with that (r') of a mixture in equal parts of the normal and the patient's plasma will enable to make a decision. A r'/r ratio lower than 1 reflects a procoagulant activity masked by the consumption process in the patient's blood, and will confirm the exact nature of the process. The ideal dose of heparin to be administered is that which will be able to reverse this ratio and to permanently maintain it between 1 and 1.5.

THE ACTION OF UROKINASES ON PLASMINOGENS. J.C. Lormeau, J. Goulay, E.G. Vairel, J. Choay. Institut Choay, Paris, France.

The enzymic activity of the two forms of urokinase (I, MW 33,000, and II, MW 54,000) was studied, using different assay systems and towards glutamyl plasminogen, lysyl plasminogen and a synthetic substrate. This study indicates that a significant difference exists between the two forms of urokinase : urokinase II is about 2.5-fold more active than urokinase I towards glutamyl plasminogen, the plasminogen circulating form. An hypothesis is proposed.