200. Experimental and Clinical Studies on Coagulation and Fibrinolysis in Toxemia of Pregnancy

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This experiment was attempted to study the existence of abnormally increased coagulation and fibrinolysis in toxemia of pregnancy. Assay of fibrinolytic activity was carried out the method of Igarashi and TNP in serum and urine of toxemic patients and pregnant rats with estradiol induced DIC (E-group). In renal and placental tissues obtained from pregnant rats, localisations of fibrin and FDP were determined using immunofluorescent techniques. Fibrinolytic activities in urine, remal and placental tissues of rats and women were found to increase with increased gestational age. Pregnant rats with estradiol-induced DIC (fibrin and FSP deposition in the renal glomeruli) were treated with heparin. In these treated animals, both fibrin and FDP deposition were removed. These results suggest that in acute toxemia a source of the elevated urinary FDP and plasmin may be derived from the local DIC in kidney.

201. Study on Placental Urokinase Inhibitor in Toxemic Pregnant Urine

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We've studied the pathophysiology of pregnant toxicosis and assumed the following theory; Endometrial fibrinolytic activity during pregnancy is suppressed by chiefly placental urokinase inhibitor (P-UKI) released from placenta, which is useful for hemostasis in postpartum. On the other hand in toxemic pregnant women, this P—UKI leaks into serum and promotes the formation of glommerulothrombosis because of the inhibition of urokinase's thrombolytic activity, which is excreted in urine in large amount. Namely, P-UKI is one of the important factors causing pregnant toxicosis.

In this report we proved some aspects of this hypothesis as follows:

1) P-UKI was contained in large amount in placenta and in retroplacental serum, which remarkably inhibited the fibrinolytic activity of urokinase.

2) Immunoelectrophoresis between P—UKI and the antiserum aganist toxemic pregnant serum proved P-UKI in toxemic pregnant serum was the same immunologically as that in placenta.

3) Fibrinolytic activity of severe toxemic pregnant urine was remarkably suppressed on Astrup's fibrin film compared as normal pregnant urine. P-UKI was extracted from toxemic pregnant urine through affinity chromatography on urokinase-sepharose, which didn't also inhibit the urokinase activity, but formed a single band against anti P-UKI antiserum on electrophoresis. Furthermore urinary P-UKI was specifically detected in toxemic pregnant urine by hemagglutination-inhibition-reaction.

202. Study on Significance of Urine FDP and Heparin Therapy in Toxemia of Pregnancy

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Values of urine FDP are within 0.5 μg/me in normal pregnants and value of more than 2 μg/ml in toxemic pregnants is estimated abnormal. On renal function examination, toxemic pregnants with heparin therapy showed a rise of GFR value before delivery.

In cases of more than two of ratio of urine FDP to urine protein values, fibrinoid depositions in renal tissues were showed 2nd so, in such cases, heparin therapy can be indicated.

203. The Comparative Study of Clinical Value for High Risk Pregnancy by Various Methods of the Detection of Feto-placental Function