metabolite) were measured with RIA in EPH-Gestosis. Lipid peroxide (MDA) was measured with Yagi's method.

Thromboxane B_2 and MDA show considerable increase. In contrast, levels of 6-keto Prostaglandin $F_{1\alpha}$ are decreased. The presently observed correlation between plasma MDA, thromboxane B_2 levels and the activity of the EPH-Gestosis is involved in these regulators of vascular tissues.

172. Immunohistochemical Localization of Placental Proteins in Normal and Toxemic Gestation

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The immunofluorescence and immunoperoxidase methods were used for the localization of pregnancy associated plasma protein A (PAPP-A), SP₁, hCG and its subunits, and hPL. In addition to 10 normal placentae and basal plates (10-40 weeks' gestation), the following specimens were examined: early pregnant uterus obtained by hysterectomies (2 cases), and severe toxemic placentae (3 cases). All materials were fixed with Zamboni's solution, 10% buffered formalin solution and 95% ethanol.

At early gestation, the PAPP-A was localized in villous cytotrophoblastic cells and endometrial glands. But it was not found in the syncytiotrophoblast (ST), the cytotrophoblast cell column or decidual cells. On the other hand, SP₁, hCG and its subunits, and hPL were localized exclusively in the ST.

On histochemical examinations of the toxemic cases with hypertention increased numbers of villous cytotrophoblastic cells and so called X-cells were observed in the placentae.

The monospecific antiserum to PAPP-A (A gift from pof. Arnold Klopper) reacted strongly and evenly with the cytoplasma of villous cytotrophoblasts and X-cells in placentae of severe toxemic patients. SP_1 , however, was not found in cytotrophoblasts or X-cells.

The present study strongly suggests that the localization and the active production site of PAPP-A are cytotrophoblastic cells, X-cells and endometrial glands. This protein may serve as a predictive marker of severe toxemia and provide informations on the etiology of this disease.

173. Studies of Urinary and Blood Plasma Protein Fractions in Severe Toxemia of Pregnancy

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Using a single radial immunodiffusion method a systemic quantitative study on the fluctuations of 10 plasma proteins in severe toxemia of pregnancy was done. The fractions of plasma protein estimated in this study were as follows: albumin, α_1 -antitrypsin, antithrombin III, α_2 -HS-glycoprotein, inter α -trypsin inhibitor, α_2 -macroglobulin, transferrin, IgG, IgA and IgM.

Main results obtained were as follows:

1. In severe toxemia, the concentration of albumin, antithrombin III, α_2 -HS-glycoprotein and IgG were lower than that of the normal pregnancy, although the concentration of inter α -trypsin inhibitor was significantly higher than that of the normal pregnancy.

2. Severe toxemia revealed the feature of chronic DIC.

3. There was no relation between total volume of proteinuria and occurrence of eclampsia or premature separation of placenta.

4. Clearance of albumin and transferrin were useful to foresee the occurrence of sequela of toxemia at puerperium 30 days.

174. Evaluation of High-Sensitive Estimation of Urine FDP on Pregnant Women

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The results of urine FDP estimation using the new high-sensitive assay kit "FDPL-test-U" on 173 pregnant women were evaluated.