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# P219. The role of gene polymorphisms of the renin-angiotensin in the etiology of early and late preeclampsia actuality

*s M ibragimova (RU) [1], E V Timokhina (RU) [2], A N Strijakov (RU) [3], K F Derisch (RU) [4]*

Preeclampsia (PE) is a complication of pregnancy that develops after 20 weeks and is characterized by new-onset hypertension accompanied by renal, hepatic, haematological and neurological dysfunction and placental insufficiency leading to fetal suffering of the fetus. PE – severe complication, develops in 15-17% of pregnant women and is the leading cause of maternal and perinatal morbidity and mortality worldwide. One of the genetic markers of pre-eclampsia are the genes of the renin-angiotensin system gene angiotensin-converting enzyme (ACE) and of angiotensinogen gene (AGT). The number of candidate genes involved in the development of pre-eclampsia, very much.

GOAL

To identify the frequency of gene polymorphism of the angiotensin - converting enzyme ACEI/D receptor gene angiotensin II type 1 - AGTR1 A1166C in women whose pregnancy was complicated by severe preeclampsia with early and late debut.

MATERIALS AND METHODS

Retrospective study case – control 41 pregnant with preeclampsia (a study group) and 25 women with uncomplicated pregnancy (control group). In the main group we considered two subgroups of early and late preeclampsia. In the first (15 patients) were classified as observations, when in connection with a grave condition of mother and/or fetus delivery were made before 34 weeks of pregnancy. To the late preeclampsia group (26 patients) – options for the development of this complication after 34 weeks. of gestation.

RESULTS

Polymorphism I/D of the gene angiotensin-converting enzyme ACE is associated with the risk of developing PE. The presence of the D allele increases the risk of developing severe PE. When the DD genotype of the likelihood of early PE is 5 times higher than late PE. Our data support the involvement of the renin-angiotensin, as well as her coding genes in the development of PE. We can say that polymorphism of ACE gene is a genetic predictor of the development of early and severe PE. The study of polymorphic loci of the ACE gene allows the use of these genetic markers for estimating individual prediction of the development and characteristics of the current PE.

CONCLUSION.

Polymorphism I/D of the gene angiotensin-converting enzyme ACE is associated with the risk of developing PE. The presence of the D allele increases the risk of developing severe PE. When the DD genotype of the likelihood of early PE is 5 times higher than late PE.

[1] I.M.Sechenov first Moscow State Medical University, [2] I.M.Sechenov first Moscow State Medical University, [3] I.M.Sechenov first Moscow

State Medical University, [4] I.M.Sechenov first Moscow State Medical University