

PLACENTAL ADRENOMEDULLIN MAY PLAY ROLE IN PREECLAMPSIA

Remzi GOKDENIZ, M.D.*, MUHITTIN YUREKLI, PhD.**

Inonu University, School of Medicine, department of Obstetrics and Gynecology*, Science-literature faculty, Molecular Biology**

Objective: Adrenomedullin (AdM) is a novel peptide with long-lasting hypotensive effect by providing vasorelaxation. It is expressed in several tissues, including adrenal medulla, heart, lung, kidneys, and cultured vascular smooth muscle cells. Also in large amounts it is present in amniotic fluid and cord blood. It was aimed to assess placental adrenomedullin levels in preeclampsia.

Study Design: Placental tissues were collected from seven preeclamptic patients and ten healthy gravidas. Tissue concentration of rat AdM in placental tissues was measured by using reverse-phase high performance liquid chromatography (Cecil 1100). Mann Whitney U test was used for statistical significance. Significance was set as $p < 0.05$

Results: AdM concentrations were 136.25 ± 7.61 pmol and 172.62 ± 7.34 pmol in preeclampsia and healthy gravidas respectively. This was significant ($p < 0.05$).

Conclusion: We have found marked low level of AdM in placentas from preeclamptic patients. These data suggest that placenta is a site of synthesis in pregnancy and low production of AdM may be responsible for the observed placental pathology in preeclampsia.