

Maternal Plasma Cell-Free Fetal DNA and Preeclampsia

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ABSTRACT

Preeclampsia(PE) is one of the serious complication of pregnancy which involves proteinuria and high blood pressure. The aim isto determine the changes in maternal serum fetal cell-free DNA (cff-DNA) in women with preeclampsia (PE) in comparisonto normotensive pregnant women.Twenty pregnant patients with PE at 28-32 weeks of gestation were included in the study. They have developed elevation of blood pressure after 24 weeks of gestation (systolic blood pressure ≥ 140 mmHg or diastolic blood pressure ≥ 90 mmHg on at least two occasions, and detection of protein in urine (≥ 300 mg in a 24-hour urine collection or dipstick measurement ≥ 1). In addition, 30 normotensive pregnant women were considered as a control group. Serum obtained and nucleic acid in free condition for both groups is tested by direct fluorescent assay.Women with PE had low gestational age at delivery and low birth weight than those with normal pregnancies. In regard to Apgar scores both within 1st and 5th minute which was not significantly different.There are significant differences in the 2 groups in regard to mother blood test of DNA. Mother serum total cff-DNA level were higher in preeclampsia group in comparison to normotensive group. In conclusion, there is evidence