Evaluation of serum levels of placental growth factor in predicting pregnancy outcome in patients with suspected pre-eclampsia in pregnants referred to the Ardebil alavi hospital

Abstract:

Background & Objective: Pre-eclampsia is a major cause of maternal death in the country. Preeclampsia is a disease theories and detailed theory and mechanism of this disease still remains unknown amount of PLGF in the blood at 9 to 11 weeks before the onset of clinical signs of preeclampsia is reduced. So based diagnostic tests according to the pathophysiology of diseases such as PLGF ideal biomarker for early screening may be useful in the diagnosis and management of patients with preeclampsia. This study aimed to investigate the relationship between pregnancy outcomes and predictors is designed PLGF.

Methods: This study is a case - control study. A sample of 103 participants in each group was considered. Sampling was done randomly to arrange admission clinic. Inclusion criteria included age between 15 and 35 years old, single pregnancy, no history of chronic hypertension or gestational diabetes and kidney problems in the current during pregnancy. Consent to follow-up, death of the fetus and the mother died before the diagnosis of preeclampsia. Both groups were followed until pregnancy termination. And the in end the outcome of pregnancy (gestational age, type of delivery and fetal weight) were studied. The subjects were interviewed using a questionnaire and by examining the follow-up of pre-eclampsia. 2 ml blood was taken from both groups after the separation of serum; the samples were stored at- 20c. Until after the completion of the sampling in the same condition placental growth factor levels were measured by ELISA.

Results: The results indicate that the two groups in terms of age, weight, education, substance abuse, socioeconomic status and gestational age matched, and there was no statistically significant difference. In pregnant women with preeclampsia serum PLGF average equal to 71/51 in 272/11 are non-native speakers of t-test with significant differences in serum of pregnant women with and without preeclampsia show. (p=0/000) in all mothers with preeclampsia who are early preterm delivery, PLGF are abnormal birth weight less than 1500 grams. In with preeclampsia women with cesarean section indicates that 7.4% of PLGF less than 12 percent of PLGF 70/4 PLGF between 12-100 and the 22.2% of 100 (normal) respectively.

Conclusion: According to the findings of this study can be used a marker ideal PLGF test, simple and the non-invasive prenatal care for primary screening in women at risk for pre-eclampsia

Key Words: Preeclampsia, placental growth factor, pregnancy outcome.