

PLACENTAL GROWTH FACTOR AS A PREDICTOR OF PRE ECLAMPSIA AND ITS SEVERITY IN ANTE NATAL POPULATION BETWEEN 24 AND 30 WEEKS' GESTATION

ABSTRACT

Introduction

Preeclampsia is a multi-system pregnancy-specific disease which affects 2 to 8% of all deliveries. A predictor which would detect pre eclampsia earlier in gestation is the need of the hour in our setup.

Aim of the Study

The aim of the study was to determine the levels of placental growth factor for predicting the occurrence of pre eclampsia and its severity in the gestational period from 24 to 30 weeks.

Materials and Methodology

A prospective study was done in 80 randomly selected women with 2.5 ml of venous blood samples collected in EDTA tubes and plasma was assayed for free PlGF using immunofluorescence method and expressed in pg/mL.

Discussion

21 out of 80 patients developed pre eclampsia (26.5%) with 6 (28.5%) developing severe pre eclampsia, of which 3 (14.2%) needed delivery within 2 weeks of detecting low PlGF.

Results

In the study, Area under the ROC curve is 0.92 which implies the diagnostic accuracy of PlGF is significant with a sensitivity and specificity of 80.95% and 89.83% respectively, for PlGF criteria of ≤ 350 .

Conclusion

From our study we concluded that Placental Growth Factor (PlGF) levels were significantly lower in patients prone to develop pre eclampsia, much lower in severe than in mild pre eclampsia. Larger studies are needed to further define the diagnostic accuracy and predictive capabilities of the various angiogenic markers.

Keywords:

Pre eclampsia, Placental Growth Factor, Predictor.