ABSTRACT

INTRODUCTION

Preeclampsia is a multi system disorder which affects the vascular system and manifests by hypertension and proteinuria after 20 weeks of gestation and returns to normal by 12 weeks in the postnatal period.

Every day, 830 women die due to Pregnancy associated disease and childbirth.

WHO estimates maternal death about 216. Most of the death occurs in the developing Countries about 98-99%. Preeclampsia and eclampsia is main contributable and preventable cause of maternal death. Maternal mortality which is higher in rural areas and among poorer communities. Now trend is changing, it also occurs in urban population.

AIMS OF STUDY

My study is about whether prolactin has a role in pathogenesis of preeclampsia and its severity, whether it can be used as a predictor of preeclampsia

STUDY DESIGN

PROSPECTIVE STUDY.

OBJECTIVES

To find if prolactin has a role in pathogenesis of preeclampsia. To compare serum prolactin level in all preeclampsia patients with normal healthy pregnant women. To correlate serum prolactin levels with severity of preeclampsia and its outcome.

MATERIALS AND METHODS

TYPE OF STUDY : PROSPECTIVE OBSERVATIONAL STUDY.


SAMPLE SIZE : 100 preeclamptic patients

PLACE OF STUDY : Antenatal outpatient department, Antenatal ward and Labor ward in the Dept of Obstetrics and Gynaecology, in Govt. Theni medical college.

METHOD OF STUDY: Careful history taking is done as per the proforma. This is followed by Complete clinical examination which is done Under aseptic precaution, this is followed by sampling, which is done by venipuncture of 6ml of blood. The blood is drawn out, of which 4ml of blood will be used for routine investigation and TSH 2ml of blood for serum prolactin which is done by ELIZA clear method. The patients were then followed up until delivery.
RESULTS

In this study, majority of the women about 37.5% was in the age group between 21 and 25 years. 51% were multigravida, 49% were primigravida. 45.5% of women are preeclampsia out of which 22% were developed nonsevere preeclampsia and 23.5% were developed severe preeclampsia. The complications like HELLP were about 4%, AP Eclampsia about 8% and IUGR 10%. The most common outcome of pregnancy was preterm delivery about 12%. It is found that mean prolactin level in preeclamptic women was 309.9 and non-preeclamptic women was 174.12 taken during mean gestational age between 31-35 weeks. In which mean concentration of prolactin level in non-severe preeclampsia was 245.66 and in severe preeclampsia was 309.9. The complication of preeclampsia like HELLP, AP Eclampsia occurred at mean level of prolactin was 383.13. Based upon the statistical analysis sensitivity of the test is 56.04% and specificity is 100%, positive predictive value is 100% and negative predictive value is 26.9%. Hence p value is <0.001, which is statistically significant.

SUMMARY

This prospective observational study was done at Theni Medical College and Hospital. After getting consent from the patients serum prolactin was taken from 200 women out of which 100 woman are normal, 100 woman are preeclamptic women after 20 week of gestation. 100 preeclamptic women came for follow up till delivery. Proper history taking, clinical examination was done, BP and urine albumin was checked in every visit. In my study, out of 91 preeclamptic women, 51 patients show mean prolactin level more than 300ng/ml. There is a significant association between mean prolactin level and complications of preeclampsia like HELLP, APeclampsia, IUGR and adverse perinatal outcome(preterm). It is found that raised mean concentration of serum prolactin level associated with hypertension in pregnancy and its complications.

CONCLUSION

This study revealed increased level of prolactin was associated with preeclampsia when compared to healthy women and more with complications. Still large number of study is needed to conclude. Thus prolactin can be used as a reliable marker for preeclampsia.

Key words: Prolactin, preeclampsia, AP eclampsia, HELLP, IUGR, venipuncture