AIM & OBJECTIVES

AIM

This study was undertaken to investigate the usefulness of standard coagulation, biochemical and hematological parameters and their measurement during third trimester of pregnancy for the prediction of preeclampsia. This helps in confirming that these parameters have significant prognostic value in the prediction of preeclampsia. Individual predictive tests for PIH are yet to be reliable, valid and economical. Therefore, numerous tests were studied for assessing the severity of PIH.

OBJECTIVES

1. To determine the distribution of cases of gravidas in the Subgroups and its effect on the severity of preeclampsia.

2. To compare the gestational age in the healthy normotensive pregnant women and preeclamptic pregnant women.

3. To evaluate the changes in systolic and diastolic blood pressure in pregnancy complicated with preeclampsia and to reflect the spectrum of disease from mild to severe preeclampsia.

4. To study the changes in Plasma Activated Partial Thromboplastin Time (APTT) and Prothrombin Time (PT) in preeclamptic pregnant women and to compare it with healthy normotensive non-pregnant women and healthy normotensive pregnant women and further to compare these coagulation parameters in mild and severe preeclamptic pregnant women.

5. To assess Plasma Fibrinogen a marker of inflammation as well as endothelial activation, in preeclamptic pregnant women and its comparison with healthy
normotensive non-pregnant and healthy normotensive pregnant women and its association with severity of the disease.

6. To determine **Plasma Fibrin Degradation Product (FDP)** in preeclamptic pregnant women and its comparison with healthy normotensive non-pregnant and healthy normotensive pregnant women in their third trimester.

7. To assess the status of **Plasma Antithrombin III (AT III)** in preeclamptic pregnant women and to compare it with healthy normotensive non-pregnant women and healthy normotensive pregnant women and its association with the severity of disease as a marker for severity of PIH and to determine its important role in pathogenesis of preeclampsia.

8. To determine the levels of **Serum hs-CRP** a marker of systemic inflammation and a key factor of endothelial dysfunction and **ESR** - another marker of inflammation in women with preeclampsia and compare it with healthy normotensive non-pregnant women and healthy normotensive pregnant women and also to study their association with the severity of preeclampsia.

9. To compare the **Serum Calcium and Magnesium** levels in healthy normotensive non-pregnant women, healthy normotensive pregnant women and women with preeclamptic pregnancy in third trimester and to find out whether hypocalcaemia and hypomagnesaemia is associated with hypertension of pregnancy.

10. To compare **Serum Lactate Dehydrogenase (LDH)** levels in the preeclamptic pregnant women with healthy normotensive non-pregnant women and healthy normotensive pregnant women and to evaluate it as an important **biochemical marker** reflecting the severity of the occurrence of preeclampsia.

11. Study of **Liver Function Tests (Serum ALT/ Serum AST/ Serum ALP/ Serum Bilirubin total / Serum Total protein/ Serum Albumin/ Serum GGT)** in healthy normotensive non-pregnant women, healthy normotensive pregnant
women and women with preeclamptic pregnancy in third trimester and to evaluate the role of their estimation in preeclampsia.

12. To determine the kidney function (Serum Urea, BUN, Serum Creatinine, Serum Uric Acid) in preeclamptic pregnant women and to compare it with healthy normotensive non-pregnant women and healthy normotensive pregnant women in third trimester and to evaluate the role of their estimation in preeclampsia.

13. To evaluate the diagnostic accuracy of Urine Albumin / Creatinine Ratio (UACR) for prediction of significant proteinuria in patients with new-onset mild hypertension in third trimester for the assessment of albuminuria and its association with adverse maternal outcomes.

14. To study hematological picture [WBC/ RBC/ Hemoglobin/ Hematocrit/ Platelet count] - one of the major elements in the pathophysiological process having a prognostic significance in determining severity of preeclampsia and to compare it with healthy normotensive non-pregnant women and healthy normotensive pregnant women.