



HAEMOSTATIC INDICATORS OF PROGNOSIS IN PRE-ECLAMPSIA

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ABSTRACT

Background:

• Hypertension Affecting 7-15% Of All Pregnancies, Remains A Leading Cause Of Maternal & Perinatal Morbidity & Mortality.
 • Haematological Abnormalities Like Thrombocytopenia And Decrease In Some Plasma Clotting Factors May Develop In Preeclamptic Women.
 This study was undertaken to compare coagulation parameters between normotensives and pre-eclamptic patients

KEYWORDS : Pre-Eclampsia, Platelet Count, PT & APTT

Introduction

Hypertension Affecting 7-15% Of All Pregnancies Remains A Leading Cause Of Maternal & Perinatal Morbidity And Mortality.^{1,2}

Preeclampsia Is An Idiopathic Multisystem Disorder Specific To Human Pregnancy And The Puerperium.³

Hematological Abnormalities Such As Thrombocytopenia And Decrease In Some Plasma Clotting Factors May Develop In Preeclamptic Women.³

Earlier It Was Stated That Only Serial Measurements Of Platelet Count Was Adequate For Intrapartum Screening.⁴

Later Combination Of (1) Platelet Count And Aptt⁵, (2) Platelet Count And Liver Function Tests⁶, (3) Platelet Count And Lactate Dehydrogenase⁷, (4) Platelet Count And Antithrombin⁸ Were Suggested For Early Detection And Screening Of The Patients With Preeclampsia.

Aims & Objectives Of The Study:

To Compare Coagulation Parameters Between Normotensives And Pre-Eclamptic Patients.

Materials & Methods:

Govt Maternity Hospital, Obg Dept, Hyderabad. Written Informed Consent From All Participants.

Study Group - 30 Patients Of Preeclampsia Aged 20-35 Years, Free From Any Other Complication Of Pregnancy.

Control Group - Age Matched 30 Normotensive Pregnant Females.

Exclusion Criteria:

1. Age <20 Years & >35 Years
2. Previous History Of Hypertension, Dm, Renal Disease, Thyroid Disorder
3. Anaemia, Coagulopathies
4. Taking Any Medications Except For Vitamins & Iron.

Haematological Parameters:

1. Platelet Count - Automated Haematology Analyzer.
2. Prothrombin Time (Pt) And
3. Activated Partial Thromboplastin Time (Aptt) - Automated Coagulometer.

Statistical Analysis

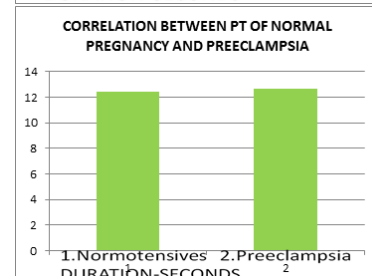
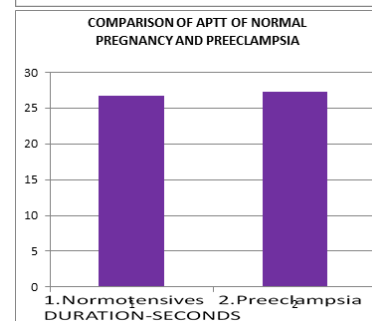
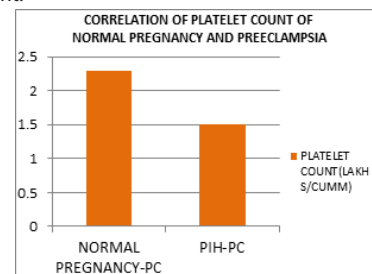
Unpaired "t" Test Was Applied.

Results

Table 1: Comparison Of Coagulation Profile Between Normotensive And Preeclamptic Patients

Mean Values	Control (Normotensives)	Case (Preeclampsia)	P Value	Significance
Platelet Count- Lakhs/Cumm	2.31	1.51	<0.0001	Extremely Significant
Pt-Seconds	12.4	12.63	0.085	Not Significant
Aptt-Seconds	26.76	27.32	0.34	Not Significant

- Decrease In Platelet Count Was Statistically Significant.
- Pt And Aptt Showed An Increase Which Was Not Statistically Significant.



Discussion

- Thrombocytopenia Is Directly Proportional To The Severity Of Pih.
- The Thrombocytopenia Observed Is Presumed To Be Due To,
- Decreased Platelet Life Span
- Increased Platelet Consumption
- Decreased Prostacycline Synthesis
- Immunological Mechanisms
- Platelet Count Below 1 Lakh/MI Are Early Predictors Of Increasing Risk Of Dic And HELLP Syndrome, Suggesting Prompt Management.
- Platelet Nadir - Best Predictor Of Maternal Mortality.
- Raised Pt And Aptt Are Fairly Good Indicators Of Severe Preeclampsia Necessitating Aggressive Treatment.

Conclusion

- Evaluation Of Platelet Count, Pt And Aptt Is Mandatory In Every Pre-Eclamptic Pregnant Patient To Reduce Maternal Morbidity & Mortality.

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