A Study Of Incidence Of Pre-Eclampsia In Relation To Parity

Dr Ranjana Dhar

Assistant Professor of Physiology, Silchar Medical College, Silchar, Assam, India

Corresponding Author: Dr Ranjana Dhar

Assistant Professor of Physiology, Silchar Medical College, Silchar, Assam, India

DOI: 10.47750/pnr.2022.13.S08.467

INTRODUCTION:
The glory of attaining motherhood is often associated with shadows of life threatening dangers to the mother and the unborn child, even though pregnancy and childbirth is purely a physiological process. Pre-eclampsia is one of the complication of pregnancy and contributes significantly maternal as well as perinatal morbidity and mortality\(^{(1,2)}\). This disorder is characterised by involvement of cardiovascular, coagulation, renal and hepatic system\(^{(3,4)}\). This is a life threatening complication of pregnancy and is characterised by high blood pressure and proteinuria\(^{(5)}\).

Extensive studies have been made to detect the aetiology and pathogenesis of the condition. But despite decade of research, the aetiology of PIH has remained elusive and no definite and universally accepted conclusion has been reached\(^{(6)}\). During normal pregnancy, renal blood flow and glomerular filtration increases appreciably. With the development of pre-eclampsia renal perfusion and glomerular filtration are reduced, resulting in impairment of renal function. The main characteristic feature of pre-eclampsia i.e. edema, proteinuria and hypertension are due to renal involvement. There occurs renal vasospasm which eventually produce endothelial damage, proteinuria and hypertension\(^{(7,8,9)}\).

So considering the mater related to our country an attempt has been made to study the incidence of pre-eclampsia in relation to parity.

AIM - To find out whether parity has any relation in the development of pre-eclampsia.

OBJECTIVE - To study which parity is more prone for the development of pre-eclampsia in normal pregnancies.

METHODOLOGY -
The present study is a cross sectional study. 80 pregnant pre-eclamptic women were included in the study. Pre-eclamptic women were divided according to Primiparous and Multiparous

Criteria for selection of cases - 80 pre-eclamptic women in were taken as cases. The pre-eclamptic women were diagnosed in accordance with American College of Obstetric and Gynaecology guidelines.

MILD PRE-ECLAMPSIA - SBP>140mmHg and DBP>90mmHg, on two separate readings four hours apart and proteinuria (1+/2+) on dipstick measurement.

SEVERE PRE-ECLAMPSIA - SBP>160mmHg and DBP>110mmHg on two separate readings four hours apart and proteinuria (≥3+) on dipstick measurement.

Exclusion criteria - Pre-eclamptic patients with history of having hypertension, cardiovascular disease, renal disease, hepatic disease, endocrine or metabolic disorder before the onset of the present pregnancy are excluded from taking as cases.

Data analysis
Data was analysed using Student’s t-test
RESULT -

Table 1 showing parity wise distribution of pregnant women with pre-eclampsia.

<table>
<thead>
<tr>
<th>Parity</th>
<th>Number of pregnant women with pre-eclampsia</th>
<th>% of pregnant women with pre-eclampsia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primiparous</td>
<td>58</td>
<td>72.5</td>
</tr>
<tr>
<td>Multiparous</td>
<td>22</td>
<td>27.5</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

In this study 72.5% of the cases were primiparous and 27.5% of the cases were multiparous in the study group.

Table 2 showing comparison of percentage of cases of pre-eclampsia among primiparous and multiparous.

<table>
<thead>
<tr>
<th>parameters</th>
<th>primiparous</th>
<th>multiparous</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of pre-eclampsia cases</td>
<td>72.5</td>
<td>27.5</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Student’s t-test had been applied to assess if there was any significance difference in percentage of pre-eclampsia cases in primiparous and multiparous. It had been observed that significant difference in percentage pre-eclampsia cases in primiparous and multiparous.

DISCUSSION -

In the present study parity is found to be related to pre-eclampsia. Significantly high incidence of pre-eclampsia is observed in primiparous (72.5%) as compared to multiparous (22.5%)

CONCLUSION -

From this study, this can be concluded that primiparous are more prone for development of pre-eclampsia.

Source of funding - Self

Conflict of interest - Nil

REFERENCES