

DOP9 EXPLORING THE LINK BETWEEN DIABETES AND PREGNANCY-INDUCED HYPERTENSION: A PRELIMINARY STUDY

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INTRODUCTION: Pregnancy-induced hypertension (PIH) can lead to severe complications to both mother and fetus. Understanding the role of diabetes in the development of PIH is crucial for better risk assessment and management.

OBJECTIVES: This preliminary study was aimed at investigating the relationship between diabetes and the incidence of pregnancy-induced hypertension in pregnant women.

METHODS: This is an observational case-control study. A total of 68 pregnant women, including 34 with PIH (140/90 mm Hg and without proteinuria) and 34 with normal blood pressure (120/80 mmHg) were enrolled using purposive sampling method. Data on pre-existing diabetes, family history of diabetes, pre-pregnancy weight and height were collected using an interviewer-administered questionnaire. Body Mass Index (BMI) was calculated from the pre-pregnancy weight and height. Ethical approval was obtained from Ethical Review Committee, Faculty of Medicine, University of Jaffna. Chi-square test was employed to assess the significance of associations. Significance level was set at $p < 0.05$.

RESULTS: Among the 34 women with PIH, a significant proportion had either pre-existing diabetes or a family history of diabetes. Majority of the women with PIH (73.5%) had diabetes prior to pregnancy than the normotensive women (5.9%). Additionally, 52.9% of the PIH women had the family history of diabetes when compared with normotensive women (26.5%). A significant association between PIH with diabetes prior to pregnancy ($p < 0.001$) and family history of diabetes ($p < 0.05$) was observed. Most of the women with PIH were overweight (52.94%) with the mean BMI of 26.88 (± 1.05) kg/m² than the normotensive women (26.47%).

CONCLUSION: The study reveals a statistically significant association between diabetes and PIH. Additionally, higher BMI is also a significant risk factor for PIH. Pregnant women with pre-existing diabetes, a family history of diabetes or higher BMI should be closely monitored to mitigate the risk of PIH.