THESIS ABSTRACT

TITLE: A Nested Case Control study to evaluate the association between Dyslipidemia and Hypertensive disorder of pregnancy in a tertiary care hospital in South India.

DEPARTMENT: Department of Obstetrics and Gynaecology

NAME OF THE CANDIDATE: Dr. Sarin Varghese

DEGREE AND SUBJECT: M.S. Obstetrics and Gynaecology

NAME OF THE GUIDE: Dr. Annie Regi

Introduction

Hypertensive disorders of pregnancy are an elusive group of diseases with varied manifestation and multifactorial etiopathologies. One of the leading hypothesis is that endothelial dysfunction in the maternal circulation is the most imperative factor which leads to development of hypertensive disorder of pregnancy. Abnormal lipid profile is shown to have a positive correlation with endothelial dysfunction. Even though pregnancy is a hyperlipidaemic state, the dyslipidaemia is more pronounced in women who develop hypertensive disorders of pregnancy than their normotensive counterparts. In this study, we tried to assess whether first trimester dyslipidemia has a significant correlation with hypertensive disorders of pregnancy which in turn in future be used as predictive marker for the same.
Aims and objectives

Aim: To determine if dyslipidemia is a predisposing factor for development of hypertensive disorders of pregnancy.

Objectives:

1. To assess if dyslipidemia diagnosed early in pregnancy will predispose to hypertensive disorders of pregnancy.

2. To assess whether severity of dyslipidemia correlates with severity of hypertensive disorders.

Materials and methods

Women presenting to the antenatal OPD of Obstetrics department, Christian Medical College with singleton pregnancy with GA less than 16 weeks were approached. Patients were recruited after consent and morning fasting lipid profile was collected. The collected samples were centrifuged and the serum was stored in Biochemistry lab. Patients were followed up till after the delivery.

Results

First trimester Hypercholesterolemia is significantly correlated with developing hypertensive disorders in later pregnancy, but this was not significant when gestational hypertension was compared with Preeclampsia. There was moderate correlation between
first trimester hypertriglyceridemia and hypertensive disorder of pregnancy but there was no such association with increasing severity of hypertension in pregnancy. First trimester HDL and LDL levels do not show any significant correlation with hypertensive disorders of pregnancy.

**Conclusion**

Hypercholesterolemia and hypertriglyceridemia in first trimester are related to development of hypertensive disorders, but a much larger study is needed to predict if it can be used as predictive marker for same.

**Keywords**

Hypertensive disorders of pregnancy, Dyslipidemia, Preeclampsia