

## **ABSTRACT**

Hypertensive disorders of pregnancy form one among the deadly triad with haemorrhage & infection, contributing to maternal morbidity and mortality. Hyperhomocysteinemia is a predictor of more than 100 diseases. Homocysteine is a sensitive marker of vit B6, B12 and folate deficiency and hence measurement of serum homocysteine levels is useful in predicting preeclampsia, eclampsia abruption and thereby reducing its complications .

## **AIMS & OBJECTIVES**

To study the relationship between the levels of serum homocysteine in normal pregnancy and pregnancies complicated by preeclampsia , eclampsia and abruption and whether the levels are indicators of severity to reduce fetomaternal morbidity & mortality .

## **MATERIALS AND METHODS**

This is a prospective study done in 160 antenatal patients with preeclampsia , eclampsia, abruption and normal pregnancies , attending the obstetrics and gynaecology department , at Coimbatore medical college hospital over a period of one year from October 2016 to September 2017. The cases were evaluated through proper history, clinical examination, blood investigations and ultrasound investigations.

## **OBSERVATION:**

In our study , preeclampsia and eclampsia is common in primigravida with 62.5% of abruption occurring with advancing age and second gravida or

more. Mild preeclampsics did not develop any complications and CVT is commonly seen in severe preeclampsia( 26.3%) and eclampsia (20%). Growth restricted fetuses is seen in severe preeclampsia (52.6%) and preterm babies is commonly seen with abruption (82.5%). Serum homocysteine levels are indicators of severity in preeclampsia and eclampsia with p values at 1% level of significance but there was no association between homocysteine levels and abruption and this might be due to small sample size. Hence estimation of serum homocysteine levels is a useful marker to predict the severity of preeclampsia and eclampsia.

#### **CONCLUSION:**

This study shows that hyperhomocysteinemia is a predictor of preeclampsia , eclampsia, abruption and its severity. Therefore serum homocysteine level estimation can be included as a routine in antenatal care management in all hospitals. Supplementation of B complex vitamins and folic acid lowers homocysteine levels and hence regular intake of folic acid and vitamin B tablets from 1<sup>st</sup> trimester of pregnancy can help to reduce homocysteine levels thereby decreasing high risk pregnancies like preeclampsia , eclampsia, abruption and its complications.

#### **KEYWORD:**

Serum homocysteine levels, preeclampsia, eclampsia, abruption placenta.