

# Gender Based Changes in Vitamin D, Vitamin D Binding Protein And Cytochrome P450 Levels In Preeclampsia

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## Abstract

Preeclampsia is a leading cause of both maternal morbidity and neonatal mortality. The etiology of pre-eclampsia (PE) has not been fully understood, it has been indicated that an upregulation of inflammatory mediators produced by the placenta as a potential causal mechanism. Several hypotheses suggests that vitamin D levels may affect the process involved in preeclampsia. The present study was planned to analyze gender-based changes in vitamin D, vitamin D binding protein and cytochrome P450 levels in maternal and umbilical cord blood samples in 20 normotensive, primigravida women and 20 age and gestation matched primigravida women with preeclampsia having singleton pregnancy. Serum vitamin D, vitamin D binding protein and cytochrome P40 analysis were carried out by solid phase sandwich enzyme linked-immuno-sorbent assay. Maternal and cord blood vitamin D levels of preeclampsia with male babies were lower as compared to female counterparts. Maternal and cord blood VDBP levels of preeclampsia with male babies were higher as compared to female counterparts. Maternal serum cytochrome P450 levels of preeclamptic with male babies were lower as compared to female counterparts. Cord blood cytochrome P450 levels of preeclamptic with male babies were higher as compared to female counterparts.

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## Biography

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