

## **A STUDY ON PLASMA 25-HYDROXY VITAMIN D LEVELS AS A RISK FACTOR IN PRIMARY HYPERTENSION**

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### **ABSTRACT**

**Aims & Objectives:** To determine the serum vitamin D levels in primary hypertensive patients.

**Methods:** 30 patients who are primary hypertensives will selected and their vitamin D Levels will measured and their vitamin D levels will be compared to age and sex matched non hypertensive controls.

**Results:** It is seen from this study that serum vitamin D levels were lower in hypertensive patients when compared to non hypertensive controls. The levels of vitamin D also inversely correlated to age, duration of hypertension and systolic and diastolic blood pressure.

**Conclusion:** 30 hypertensive cases and 30 non hypertensive controls attending to out patient department of hospitals attached to Bangalore medical college and research center were investigated for evaluation of vitamin D status. Based on the observations made in them the following conclusions were drawn: The hypertensive patients had lower levels of vitamin D with vitamin D status of deficiency in 50% of the cases and insufficiency ion 43.3% of the cases and normal levels in 6.7% of the cases Non hypertensive controls showed vitamin D status of normal in 66.7% of controls and insufficiency in 33.3% of the controls without deficiency. Age of the cases, duration of hypertension, systolic blood pressure and diastolic blood pressure inversely correlated to vitamin D levels. Body mass index, diet of the patient, alcohol consumption, number of anti-hypertensive drugs, drug compliance, family history of Hypertension and fundus status did not correlate to vitamin D levels. Vitamin D is an independent risk factor that is associated with primary or essential hypertension.

**KEYWORDS:** Vitamin D Levels, Hypertensive, Anti-Hypertensive Drugs, Blood Pressure