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CORRELATION OF HYPERHOMOCYSTINEMIA WITH HYPERTENSION

ASWINI KUMAR SAHOO¹, SUDHASMITA RAUTA² & SUBASH CHANDRA MOHAPATRA³

¹Associate Professor Department of Medicine, Maharajah's Institute of Medical Sciences, Vizianagaram, Andhra Pradesh, India

²Assistant Professor, Department of Pathology, Maharajah's Institute of Medical Sciences, Vizianagaram, Andhra Pradesh, India

³Professor, Department of Medicine, Maharajah's Institute of Medical Sciences, Vizianagaram, Andhra Pradesh, India

ABSTRACT

The association of homocysteine with blood pressure deserves attention because blood pressure may mediate part of the cardiotoxic effect of homocysteine 2,3 . The present study included 40 cases of hypertension and age & sex matched 20 healthy control subjects. They were further divided into 3 groups, Viz: Group-I: With hypertension, Group-II: Hypertension with CAD and Group-III: Hypertension with Type 2 DM. Plasma homocysteine was estimated in both case and control groups by CLIA (Chemiluminescence Immune Assay). Primary objective being study of relationship of plasma homocysteine and hypertension analysis of data shows that mean plasma homocysteine level of $38.340 \pm 15.250 \,\mu$ mol/L when compared with systolic blood pressure $160.1 \pm 13.071 \,$ mmHg has 'p' value $< 0.05 \,$ and 'r' value 0.6741. This warrants for intervention by homocysteine lowering agents like folic acid, Vit.B-12, Vit.B-6 in addition to control of lipid profile in gaining importance in management of hypertension, CAD and Type 2 DM.

KEYWORDS: Folate, Homocysteine, Hypertension, Methionine