A STUDY ON SERUM URIC ACID LEVELS IN ESSENTIAL HYPERTENSION AND ITS RELATION WITH SEVERITY, DURATION OF HYPERTENSION, SERUM CHOLESTEROL AND TRIGLYCERIDE LEVELS

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ABSTRACT

Background & Objective

The topical role of uric acid and its relation to cardiovascular disease, renal disease, and hypertension is rapidly evolving. The association of raised serum uric acid levels with various cardiovascular risk factors has often led to the debate of whether raised serum uric acid levels could be an independent risk factor in essential hypertension. Hence we carried out a study to see if there is a relationship between serum uric acid and hypertension and its correlation with lipid cholesterol and triglycerides.

Methodology

The study was carried out in M B S Hospital, & Associated Group of Hospitals, Medical College, Kota, Rajasthan. The study period was from January 2012 to November 2012. A total of 100 patients were studied of which 50 were cases and 50 controls. The patients were included if they satisfied the JNC VII criteria for hypertension. They were excluded if they were having any other condition known to cause raised serum uric acid levels & secondary hypertension.

Results

The study showed that serum uric acid levels were raised in patients with hypertension in comparison to normotensives. Uric acid showed a rise in stage 2 of hypertension and duration > 5 years. There were high levels of cholesterol and triglycerides in patients with hyperuricemia.

Interpretation & Conclusions

We concluded that measuring uric acid is a useful test for the clinician, as it carries important prognostic information.

KEYWORDS: Serum Uric Acid, Hypertension, JNC VII, Hyperuricemia, eNO, Redox Shuttle