

## **ASSOCIATION OF hs CRP IN METABOLIC SYNDROME PATIENTS**

**Abstract Background:** Metabolic syndrome is known to predispose to atherosclerosis. C-reactive protein, a marker of systemic inflammation is significantly associated with the atherosclerotic process.

**Methods:** We prospectively studied the relationship between high-sensitivity C-reactive protein (hs CRP) with various components of metabolic syndrome in 50 patients with metabolic syndrome at our tertiary care centre in CHENNAI, TAMIL NADU.

**Results:** 50 patients diagnosed with metabolic syndrome were studied. There were 21 males and 29 females. In our analysis, hs-CRP was found to be significantly increased in patients with diabetes mellitus ( $p < 0.023$ ), with increase in duration of diabetes ( $p < 0.0446$ ), those whose diabetes was not controlled ( $p < 0.0365$ ) and those with abnormal waist circumference ( $p < 0.0019$ ). There was no significant association between hs-CRP and high triglycerides, hypertension, reduced high density lipoprotein cholesterol, smoking and non vegetarian diet. CRP levels are found to be low in those who exercise and have physical activity ( $p < 0.0426$ ). Further, hs-CRP increased significantly with increasing number of components of metabolic syndrome ( $p < 0.0001$ ). hs CRP was found to be elevated in about two third (68%) of patients with metabolic syndrome

**Conclusions:** Measurement of hs-CRP can be used as a surrogate marker of chronic inflammation in patients with metabolic syndrome

Key words: Metabolic syndrome, hs-CRP, India.