

STUDY OF C-REACTIVE PROTEIN AND FIBRINOGEN IN HYPERTENSION AND THEIR ROLE IN DEVELOPMENT OF HYPERTENSION

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ABSTRACT

The present study was conducted to evaluate the acute phase reactants regular C-reactive protein (CRP) and fibrinogen in hypertensive subjects at MBS hospital, Govt. Medical College Kota, Rajasthan, India. All subjects were divided in two groups 50 hypertensive and 50 healthy controls, between 30-60 years of age, of either gender were evaluated for their serum CRP and plasma fibrinogen levels. During study 50 subjects with hypertension were evaluated for CRP and fibrinogen levels, of which 29 (58 %) were males and 21 (42 %) were females, in addition to 50 apparently healthy subject as a control group, 33 (66%) of them are males and 17(34%) were females. The mean serum CRP levels were significantly higher in subjects with hypertension compared with control group of healthy subjects ($17.27 \pm 12.24 \text{ mg/l}$ versus $8.28 \pm 5.78 \text{ mg/l}$, $p < 0.0001$). Similarly mean plasma fibrinogen levels were also significantly higher in hypertensive compared with control group ($470.6 \pm 150.9 \text{ mg/dl}$ versus $298.54 \pm 113.6 \text{ mg/dl}$, $p < 0.05$). The present study also detected significant positive correlation between C-reactive protein and fibrinogen in subjects with hypertension ($r = 0.42$, $p < 0.05$).

KEYWORDS: Hypertension, Systolic Blood Pressure, C - Reactive Protein, Fibrinogen