

($r=0.513$, $p<0.01$). Multiple linear stepwise regression analysis showed that ambulatory arterial stiffness index still correlated with tumour necrosis factor- α ($b=0.272$, $p<0.01$).

Conclusion Ambulatory arterial stiffness index was correlated with tumour necrosis factor- α . Inflammation was relevant to the development of arterial stiffness in prehypertensives.

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IMPACT OF TUMOUR NECROSIS FACTOR- α ON AMBULATORY ARTERIAL STIFFNESS INDEX IN PREHYPERTENSIVES

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Objective To investigate the impact of tumour necrosis factor- α on ambulatory arterial stiffness index in prehypertensives.

Methods One hundred normotensives and one hundred and five prehypertensives were recruited, while one hundred and ten hypertensives were enrolled. 24 h ambulatory blood pressure monitoring (ABPM) was carried out in the three groups, respectively, and ambulatory arterial stiffness index (AASI) was computed. Tumour necrosis factor- α (TNF- α) was measured using radioimmunity kits.

Results Tumour necrosis factor- α and ambulatory arterial stiffness index in prehypertensives (44.21 ± 9.81 pg/ml, 0.42 ± 0.13), were higher than that in normotensives (26.91 ± 12.35 pg/ml, 0.36 ± 0.15), while lower than that in hypertensives (59.74 ± 23.38 pg/ml, 0.49 ± 0.12). Pearson correlation analysis showed that the level of tumour necrosis factor- α was positively correlated with ambulatory arterial stiffness index in prehypertensives