

## Altered oxidant antioxidant status in non-obese men with moderate essential hypertension.

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BACKGROUND: Although a wide number of experimental evidences are available regarding oxidant-antioxidant disturbance in hypertension, clinical data supporting it is lacking in men in early stages of hypertension. AIMS: The objective of the study was to evaluate oxidative status and antioxidant activities in males with stage I essential hypertension. MATERIALS AND METHODS: Thirty hypertensives and 21 normotensives were included in the study. Protein carbonyl, reduced glutathione, glutathione peroxidase, catalase and fasting glucose were assessed in both the groups. STATISTICAL ANALYSIS: Results were analyzed by student's 't' test and linear regression analysis test. RESULTS: Plasma protein carbonyl and glutathione peroxidase were significantly increased and catalase and GSH were significantly reduced in the hypertensive group compared to normotensive subjects. There was a significant negative correlation between glutathione peroxidase and catalase in the test group. CONCLUSIONS: The data from the present study indicates an alteration in oxidant-antioxidant status in non-obese men in early stages of essential hypertension.

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