

## Hormone replacement therapy increases serum levels of nitric oxide end products

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Cardiovascular disease is the leading cause of illness and death in women. Women appear to have greater resistance to atherosclerosis in the pre menopausal years and this is attributed in part to an estrogen dependent increase in the basal nitric oxide synthesis. Women in post menopausal years have estrogen deficiency due to the waning ovarian activity. Hormone replacement therapy potentiates the release of endothelium derived relaxation factor, Nitric oxide and thus reduces the risk of coronary artery disease in postmenopausal women. The study group included fifty postmenopausal women and the control group included fifty healthy women with regular menses. Serum levels of nitric oxide end products (NOEP) were measured in the control group and before and after hormone replacement therapy in the study group. Women in the study group were placed on Hormone replacement therapy (HRT) for six months. Serum NOEP levels in the study group before hormone replacement therapy ( $19.57 + 2.44$ ) were significantly lower ( $p < 0.001$ ) than the control group ( $34.58 + 6.23$ ). The serum NOEP levels increased significantly ( $p < 0.001$ ) after hormone replacement therapy ( $29.97 + 3.82$ ) in the study group. The rise was significantly ( $p < 0.001$ ) in the hysterectomised post menopausal women ( $31.08 + 2.84$ ).

### Biography

Shilpika Saxena has completed her M.B.B.S. from Government Medical College, University of Rajasthan, India and M.D. from Armed Forces Medical College, Pune University, India, residency at Armed Forces Medical College, Pune University, India. She is currently serving as the Assistant Professor, Biochemistry in the Medical University of the Americas, Nevis.

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