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Effect of Sodium Tungstate on Obesity Induced Cardiac Hypertrophy and Oxidative Stress

Randhir SINGH *, Manjeet SINGH † & Pawan KRISHAN

Department of Pharmaceutical Sciences and Drug Research,
Punjabi University, Patiala, India, 147002.

SUMMARY. **Obesity was induced by high fat diet (30 % fat by weight). Wistar rats of 225-250 g were kept on high fat diet to induce obesity for 90 days. Sodium tungstate (2 mg/ml, in drinking water) was administered for 90 days. Obesity was assessed by measuring % age change in body weight, WHR ratio, adiposity index and obesity index. Left ventricular cardiac hypertrophy was assessed in terms of left ventricular weight, left ventricular wall thickness, left ventricular protein content and left ventricular collagen content. Oxidative stress was measured in terms of levels of thiobarbituric acid reactive substances (TBARS), superoxide anion generation (SAG) and level of reduced glutathione. Sodium tungstate significantly attenuated the increase in body weight adiposity index, obesity index, TBARS, SAG and reduced glutathione, whereas no significant change was observed the parameters of cardiac hypertrophy. So, it can be concluded that sodium tungstate significantly attenuated high fat diet induced obesity and oxidative stress but no significant decrease was observed in the parameters of cardiac hypertrophy.**

KEY WORDS: Obesity, Oxidative stress, Sodium tungstate.

* Author to whom correspondence should be addressed. *E-mail:* dahiya_rsd@rediffmail.com