

Protective Effect of Rosemary (*Rosmarinus officinalis*) Extract on Lithium- Induced Renal and Testis Toxicity in Albino Rats

Author: **Marwa A Mwaheb**, Ola N Sayed and Safaa H Mohamed

Journal of Drug Metabolism & Toxicology 2016, 7(4); 216

بحث منفرد

Abstract

Lithium is used common as an effective drug for the medication of many psychiatric disorders in human. The current study was proceed to analysis the protective effect of rosemary leaves extract on renal and testis toxicity induced by Lithium in rats. Forty adult Albino male rats were divided into four equal groups. Group (I) was kept on standard rodent chow and served as healthy control group, Group (II) were orally administrated with 220 mg/kg/day of rosemary extraction, group (III) were orally administrated with 100 mg/kg/day of lithium carbonate (Li_2CO_3) and Group (IV) were orally administrated with both 220 mg/kg/day rosemary extraction and 100 mg/kg/day (Li_2CO_3). All groups were treated for 4 weeks. Lithium caused significant increase in plasma Malondialdehyde (MDA), creatinine, urea, Neuron Specific Enolase (NSE) and Human Chorionic Gonadotropin (HCG) levels, and while, significant decrease in plasma free and total testosterone, Superoxide Dismutase (SOD) and Glutathione (GSH) levels has been reported as compared to healthy control group. On the other side, treatment with rosemary extraction was significantly improving the level of oxidative stress, biomarkers (HCG), (NSE) and routine blood test of kidney function. Conclusion, rosemary leaves extract had a protective effect against renal and testis toxicity induced by lithium in rats.