

Effects of Garlic (*Allium sativum*) Juice on Semen Oxidation in Male Rats

Authors : Jamshid Ghiasi Ghalehkandi, Naser Maheri Sis, Yahya Ebrahimnezhad, Shahin Hassanpour

Abstract : The objective of present study was to examine the effects of fresh garlic juice on semen malondialdehyde (MDA), superoxide dismutase (SOD), glutathione peroxidase (GPx) and total antioxidant status (TAS) in male rats. Fifty-four male rats (230-250 g) were allocated into 3 treatment groups (each include 3 groups and 6 replicate). Group 1 served as water control. In group 2, rats were gavaged with 60 mg/kg garlic juice. In group 3, rats were offered 120 mg/kg garlic juice. Animals received treatments orally and ad libitum access to chow pellets and fresh water. After 4 weeks, animals were killed, testes were taken out and semen samples were used to determine MDA, SOD, GPx and TAS activity. According to the results, garlic juice (120 mg/kg) significantly declined semen MDA activity compared to control group ($P<0.05$). These results suggest that presumably garlic juice protects semen oxidation in rat testes.

Keywords : garlic juice, chromium chloride, semen, rat

Conference Title : ICVBS 2014 : International Conference on Veterinary and Biomedical Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : June 19-20, 2014