

Effect of Oral Administration of "Gadagi" Tea on Activities of Some Antioxidant Enzymes in Rats

Authors : A. M. Gadanya, M. S. Sule

Abstract : Effect of oral administration of Gadagi tea on some antioxidant enzymes was assessed in healthy male albino rats. The rats were grouped and administered with standard doses of the 3 types of Gadagi tea i.e. Sak, Sada and Magani for a period of four weeks. Animals that were not administered with the tea constituted the control group. At the end of fourth week, the animals were sacrificed and their serum superoxide dismutase (SOD), glutathione reductase (GR) and catalase (CAT) activities were determined. The activities of the enzymes were also determined in the brain, liver, kidney and intestine homogenates of the rats. Mean SOD activity in brain of rats orally administered with "sada" was found to be significantly higher ($P < 0.05$) than that of the control group. Mean CAT activity in the intestine of rats orally administered with "magani" was found to be significantly higher ($P < 0.05$) than that of the control group and the experimental groups of Sak and Sada at standard dose level. Thus, all the "Gadagi" tea preparations studied at standard dose level could stimulate antioxidant enzymes, especially SOD in brain and CAT in intestine (by Sada) and CAT in intestine (by Magani).

Keywords : "Gadagi" tea, superoxide dismutase, catalase, glutathione reductase

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