

In vivo Protective Effects of Ginger Extract on Cyclophosphamide Induced Chromosomal Aberrations in Bone Marrow Cells of Swiss Mice

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Abstract : The protective effect of Ginger Extract against cyclophosphamide induced cytotoxicity was evaluated in in vivo animal model using analysis of chromosomal aberrations in somatic cells of mice. Three doses of Ginger Extract (150mg/kg, 200mg/kg, and 250mg/kg body weight) were selected for modulation and given to animals after priming. The animals were sacrificed 24, 48, 72 hrs after the treatment and slides were prepared for the incidence of chromosomal aberrations in bone marrow cells of mice. When animals were treated with cyclophosphamide 50mg/kg, showed cytogenetic damage in somatic cells. However, a significant decrease was observed in the percentage of chromosomal aberrations when animals were primed with various doses of Ginger Extract. The present results clearly indicate the protective nature of Ginger Extract against cyclophosphamide induced genetic damage in mouse bone marrow cells.

Keywords : ginger extract, protection, bone marrow cells, swiss albino mice

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