The Effect of Green Tea on Radiation-induced Late Biological Effect in Mice

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This study was performed to determine the effect of Green tea on the late biological effect (survival, hematological change, carcinogenesis) of mice irradiated with 3 Gy of gamma-radiation. There was little difference in body weights between normal and irradiated mice. Survival rate were decreased in irradiated mice and the survival rate and mean survival time of the groups treated with green tea were far better than the irradiation control group. An elevation of mean number of total leukocyte or lymphocyte counts was Green tea reduced the incidence of tumor development seen at week 12 of the group treated with green tea. Stimulated recovery by the extract from green tea was also observed in thrombocyte. Main gross findings of irradiated mice were appeared as enlargement of spleen, thymus and liver, tumorous nodules in lung and cyst or mass in ovary. Microscopically, there were various findings including hematopoietic and lymphoid tumor, lung cancer, ovarian cancer and cancer of other lesions. Further studies are needed to characterize better the protective nature of active compounds