Comparison of Anti Cancer Activity of Curcuma longa with Mentha piperita Using Ehrlich Ascite Carcinoma in Swiss Albino Mice

Meera SUMANTH* & Somayeh A. VAKILI

Visveswarapura Institute of Pharmaceutical Sciences,
22nd Main, 24th Cross, BSK II Stage, Bangalore-560070, Karnataka, India

SUMMARY. Swiss albino mice (25 ± 5 g, either sex) were distributed into 5 groups (n = 12). Group I and II mice served as normal control and EAC control, respectively. Group III, IV and V mice received cisplatin 3.5 mg/kg, i.p., turmeric and mint, 500 mg/kg, orally, respectively, for nine days. Experimental tumor was induced in mice by inoculation of 1x10⁶ Ehrlich ascites carcinoma cells (EAC). Change in body weight, survival time, ascites fluid volume and packed cell volume were noted. At the end of study, WBC, RBC, Hemoglobin content in blood and lipid peroxidation (LPO), superoxide dismutase (SOD), catalase (CAT), and glutathione (GSH) in liver homogenate were estimated. Turmeric and mint treatment in EAC bearing mice showed reduction in body weight, tumor volume, packed cell volume and percentage increase in life span, increased RBC and Hb, reduced WBC count and normalized antioxidant parameters. Aqueous extract of mint and turmeric exhibited significant (p < 0.001) anticancer activity in mice. Mint showed superior anticancer activity than turmeric.

KEY WORDS: Anticancer activity, Ehrlich ascites carcinoma, Mint, turmeric.

* Author to whom correspondence should be addressed. E-mail: meersumanth@gmail.com