P15 EFFECTS OF CURCUMA COMOSA EXTRACT ON CLINICAL BLOOD CHEMISTRY IN RATS

Suknay W1, Srichairat S2, Phivthong-ngam I3, Chaichantipyuth C4, Niwattisaiwong N4, Lawanprasert S4

1Inter-Department of Pharmacology, Chulalongkorn University, 2Faculty of Veterinary Sciences, Chulalongkorn University, 3Faculty of Medicine, Srinakharinwirot University, 4Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok Thailand

Curcuma comosa Roxb. (Waan chak mod look) rhizome has been used traditionally for abnormal symptoms of uterus. In this study, rhizome of C. comosa was extracted with 95% ethanol and effects of the extract on clinical blood chemistry (aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP), total bilirubin, direct bilirubin, total protein, albumin, globulin, blood urea nitrogen (BUN), serum creatinine (SCR), glucose, total cholesterol, triglyceride (TG), high density lipoprotein-cholesterol (HDL-C), low density lipoprotein-cholesterol (LDL-C), sodium, potassium, calcium, chloride, estrogen, follicle stimulating hormone (FSH) and luteinizing hormone (LH)) and hematology (hematocrit (Hct), hemoglobin (Hb), RBC count, mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), RBC morphology, platelet count, white blood cell (WBC) count and % differential WBCs) were also determined. Forty Wistar rats were randomly divided into 4 groups of 10 rats each. The experimental groups were received the extract orally at dosages of 100, 250 and 500 mg/kg/day respectively whereas rats in the control group were given corn oil at 1 ml/kg/day for 30 consecutive days. The results showed that extract did not affect body weight, food and water consumption of the rats. Serum alkaline phosphatase and potassium levels were significantly increased in rats receiving the 500 mg/kg/day of the extract. Estradiol concentrations of rats receiving the extract at the doses of 250 and 500 mg/kg/day were significantly higher than those of the control. Likewise, no effects of C. comosa extract were observed on several hematological parameters.