Toxicity assessment of medicinal herb aqueous extracts orally administered to rats for 2 consecutive weeks

Hang Sik Roh, Ji Hyeon Seok, Jong Kwon Lee, Tae Sung Kim, Choi Hye Kyung, Saet Byul Cho and Ja Young Jeoung
National Institute of Food and Drug Safety Evaluation, Korea

Dictamnus dasycarpus Turcz, Atractylodes macrocephala Koidzumi, Polygonae Radix, Alismatis Rhizoma and Corydalis Tuber are each of several medicinal herbs. But, we will pay few attentions to the potential hepatotoxicity of herbal medicine and there are only a few clinical reports about that. To evaluate its safety, the acute toxicity was determined by oral feeding both male and female Sprague-Dawley(SD) rats with herbs at the doses of 1000, 2000 and 4000 mg/kg. As the results, the body and organ weights and behavior were not changed relative to the control rats. In addition, aqueous extract of these herbs was orally administered daily at doses of 0, 500, 1000 and 2000 mg/kg/day to groups of 10 male and 10 female rats for 2 weeks. As the results, no dead animals or abnormal necropsy findings were found in the control or treated group. In addition, there are no significant changes in body weight or food consumption, serum biochemistry and hematology in any group. Thus, these results suggest that the 2-week oral administration of several herbs of dose 2000 mg/kg did not significant change the body weight, organ weight, hematological and biochemical value in SD rats.

Biography

Hang Sik Roh has completed his DVM at the age of 28 years from Chungbuk National University in Korea. He is the senior scientific officer of National Institute of Food & Drug Safety Evaluation.

72notul@korea.kr