STUDY THE ANALGESIC EFFECTS OF SUDARSHANA POWDER IN ANIMAL MODEL

W.A.S.S.Weerakoon[1*], P.K.Perera[2], D. Gunasekara[3], T.S.Suresh[4]

[1,2] Institute of Indigenous Medicine, University of Colombo, Sri Lanka
[3,4] University of Sri Jayewardenepura, Sri Lanka
*sarojaweerakoon@yahoo.com

Sudarshana powder (SP) is a very efficient herbal preparation widely used by Ayurvedic practitioners. Traditionally it is used as an, antipyretic, anti-inflammatory and anti-diabetic formulation. It has 53 ingredients; the main ingredient of the SP was Swertia chirata which was later replaced by Andrographis paniculata (Burm. F.) Nees in Sri Lanka. The present study aimed to investigate the analgesic effect of SP in an animal model of Wistar rats. Analgesic effect was tested using the model of acetic acid induced writhing in rats. Healthy male Wistar rats were randomly assigned into 3 groups (n=6 in each) as Control (Distilled Water), Positive Control (Diclofenac sodium, 25mg/kg) and Test (SP, 0.8g/kg). Abdominal muscle contractions were induced in rats by intraperitoneally injection of 0.6% solution of acetic acid (10ml/kg) to all the groups after 30 minute of the oral treatments. The number of writhes occurring between 5 and 20 min after acetic acid injection was counted. Analgesic effect, indicated by the reduction in the mean of the number of abdominal constrictions in the test groups compared to the control group, was calculated as the percentage inhibition of abdominal constrictions. When compared to the control, the SP showed statistically significant ($P< 0.05$) effects and the percentage inhibition of writhing with 32%, while standard drug diclofenac showed 41% inhibition of writhing in experimental animals. The results of the present study noted that SP has remarkable ($p<0.05$) analgesic effect in Wistar rats.

Key words; Analgesic effect, Sudarshana powder. Number of writhes