Study of acute and 28 days repeated oral toxicity of Siddha formulae Seenthilchooranam in Wistar albino rat

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Abstract

Seenthil Chooranam is one of the traditional Siddha formulae used in various kinds of diseases in Siddha system of medicine. The test drug Seenthil Chooranam (Chooranam-one of the 32 types of internal medicine), mentioned in classical Siddha text Agasthiyar Paripuranam – 400, is used for Megam (diabetic mellitus), Eelai (tuberculosis), Kasam (cough), Elaipu (bronchial asthma), Erandavayu (scrotal swelling). The ingredients of this formulae include Seenthil (Tinospora cordifolia), Karisalai (Eclipta Alba), and Earthworm (Eudriluseugeniae). The present study aimed at evaluating the safety of Seenthil Chooranam as per OECD Guidelines 423,407. This study focused on acute and repeated dose 28 days oral toxicity studies in wistar albino rat. In acute study, Seenthil Chooranam was administered orally at the dose of 2000mg/kg. b.w and animals were observed for toxic signs for a period of 14 days. In repeated dose 28 days oral toxicity study, Seenthil Chooranam was administered at the dose of 900mg and 1800mg/kg b.w. Mortality, toxic signs, body weight, food and water consumption, haematological, plasma biochemical parameters, gross necropsy, relative organ weights and histopathology were assessed. The results of these studies revealed that the drug Seenthil Chooranam did not produce any death at the dose of 2000mg/kg body weight. The LD₅₀ value is greater than 2000mg/kg body weight. Repeated dose 28 days oral toxicity study was observed without any abnormalities and No-Observed Adverse Effect Level (NOAEL) was noted. It confirms the safety of the drug which proved its utility in long term administration without any harm to the human being.

Keywords: Toxicity study, Seenthil Chooranam, Siddha medicine

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