4TH INTERNATIONAL CONFERENCE ON

PHARMACOLOGY & TOXICOLOGY

MARCH 15-16, 2023 | (Hotel Crowne Plaza Dubai - Deira)

Dr. S. Sugin Lal Jabaris

Sugin Lal Jabaris S[1], Divya Sankaramourthy[1], Wilson E[2], Venkataraman Krishnamurthy[1], Bhavani K[1], Manoj A[1] and Sivanandham E

[1] *Department of Pharmacology, Siddha Central Research Institute, Central Council for Research in Siddha, Ministry of Ayush, Govt. of India, Anna Govt. Hospital Campus, Chennai-600 106, Tamil Nadu, India*
[2] *Central Council for Research in Siddha, Ministry of Ayush, Govt. of India, Chennai - 600 047, Tamil Nadu, India*

CARDIOPROTECTIVE EFFICACY OF SWASA KUDORI - A SIDDHA FORMULATION AGAINST ISOPROTERENOL-INDUCED MYOCARDIAL INFARCTION IN RATS

Inflammation and oxidative stress are major contributing factors for cardiovascular disorders triggering atherosclerosis, endothelial dysfunction, and ischemic heart disease. The inherent phytochemicals in traditional medicines offers a novel approach to treat heart diseases. Noteworthily, the Siddha system of medicine offers a holistic approach towards preventive, promotive and curative therapy for varied ailments. However, all medicines have adverse effects, and indigenous medicines are no exception. A meticulous scientific approach focusing on the safety and efficacy of Siddha medicines in particular is essential. This study presents the safety and cardioprotective effect of Swasa Kudori, a polyherbal Siddha formulation containing Calotropis gigantea Linn. and Piper nigrum Linn. The safety of the drug was tested following OECD 408 guidelines. For testing the cardioprotective effect, Isoproterenol induced myocardial ischemia, a well-established model was used. In the study, animals in different groups were pre-treated orally with 4 different doses of Swasa Kudori and the standard Vitamin C (40 mg/ kg) for 14 days. Myocardial infarction was induced with intraperitoneal administration of Isoproterenol. No marked changes were observed during clinical observations such as mortality, morbidity, behavioural deficits, biochemical and haematological parameters when Swasa Kudori was administered repeatedly for 90 days upto a dose of 1000mg/kg b.wt indicating its safety. Moreover, in the cardioprotective study, rats treated with Swasa Kudori exhibited remarkable improvement in a dose-dependent manner with lowered levels of CK-MB and LDH exhibiting its efficacy. In addition, TTC staining of hearts authenticated these findings with the reduction in infarct size and necrosis in treatment groups. Altogether, data obtained in this study corroborated the cardio-protective efficacy of traditionally used Siddha formulation Swasa Kudori wherein these effects are attributable to their anti-oxidant potentials.

Keywords: Ayush, Complimentary & Integrative Medicine, Siddha Medicine, Cardiotonic, Calotropis gigantea Linn., Piper nigrum Linn.

Biography:

Dr. S. Sugin Lal Jabaris, Principal Investigator (Sanction Order No: 390/2020-21; IMR Project, CCRS), Research Officer (Pharmacology), Department of Pharmacology, Siddha Central Research Institute, Central Council for Research in Siddha, Ministry of Ayush, Govt. of India, Anna Govt. Hospital Campus, Chennai-600 106, Tamil Nadu, India. He has completed Master of Pharmacy from The Tamil Nadu Dr. M.G.R Medical University, and PhD from Sri Ramachandra Institute of Higher Education and Research, Chennai, Tamil Nadu, India. He has authored or co-authored more than 20 research/review publications in peer-reviewed indexed journals.

doi.org/10.51219/URForum.2023.Sugin-Lal-Jabaris
ISBN-978-1-7393132-6-5