

6th Edition of International Conference on
**Pharmacognosy and
Medicinal Plants****FORMULATION AND EVALUATION OF NOVEL HERBAL AEROSOL FOR ARTHRITIS****Rajasekaran Aiyalu¹, Ithyaventhana Subramaniam², Arulkumaran Govindarajan¹
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A novel herbal aerosol spray formulation containing methanol leaf extracts of *Cardiospermum halicacabum* (MLECH) and *Vitex negundo* (MLEVN) was formulated using MLECH and MLEVN (2% w/v each) and their quality control, stability and efficacy studies were carried out as per the United States Pharmacopoeia (USP), International Conference on Harmonization (ICH) and Organization for Economic Co-Operation and Development (OECD) guidelines, respectively. Complete Freund's adjuvant (CFA) induced arthritis method was employed for the evaluation of anti-arthritic activity. Assessment of body weight, biochemical parameters, hematological parameters, serum biomarker levels, photographic, radiographic analysis and histopathological investigations were carried out as a supportive evidence for the anti-arthritic efficacy of the developed novel herbal aerosol spray formulation. The results of the quality control test complied with USP standards and the stability study clearly revealed that the formulated topical herbal aerosol spray was found to be stable. Significant ($p < 0.01$) alterations in rat paw volume, body weight, biochemical, hematological, serum biomarker levels and reduction in inflammation and hyperplasia of synovium of formulation treated rats were observed compared with arthritic rats. The study concluded that the formulated novel herbal aerosol spray exhibited good anti-arthritic activity.

Biography

Rajasekaran Aiyalu is a Professor of KMCH College of Pharmacy and has more than 28 years of teaching and research experience in the field of Pharmacy. He has received research grants from various Government agencies like DSIR, DST, DRDO and AICTE, etc. He has 5 patents to his credit. He has published 84 research papers in international and 134 research papers in national peer reviewed journals. He has visited Malaysia, Singapore, Thailand, Philippines, Sri Lanka, UAE and presented papers in various national and international conferences. He has received Best Teacher Award from the Tamilnadu Dr. M G R Medical University, Chennai.

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