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Anti - inflammatory activity of Siddha formulation of Senkaluneer Chooranam in albino rats

Jegatheeswaran.V*, Kanagasundaram.S[1], Sowmiya.S[2], Manoharan. A[3]

[1] PG Scholar, Department of Gunapadam, GSMC, Palayamkottai, Tamil Nadu, India.
[2] PG Scholar, Department of Pothu Maruthuvam, GSMC, Palayamkottai, Tamil Nadu.
[3]Professor, Head of the Department, Department of Pothu Maruthuvam, GSMC, Palayamkottai, Tamil Nadu.
Corresponding Author: Jegatheeswaran V, PG Scholar, Department of Pothu Maruthuvam, GSMC, Palayamkottai,
E-mail: *jegatheeswaran79@gmail.com*

Abstract

Siddha system is one of the ancient system of medicine. In this system the knowledge of drugs is not only limited to Mono herbal drug, Poly herbal drug, but also expands to metals and minerals. Poly herbal drug is efficacy than the Mono herbal drug. *SKC* (SKC) is one of the Poly Herbal formulation which is used to treat mostly vatha diseases.
The combinational blend of herbs acts in synergy to subside the infection with its own natural antibiotics. This scientific paper evaluates anti-inflammatory activity of Senkaluneer Chooranam to treat Vatha diseases (Inflammatory diseases) in adult. The anti-inflammatory activities of Siddha formulation Senkaluneer Chooranam at a dose of 100 and 200mg/kg were evaluated using carrageenan-induced paw edema method. The inflammation was readily produced in the form of edema with the help of irritant such as carrageenan.

Keywords: Siddha system, Senkaluneer Chooranam, Anti-Inflammatory activity.

Introduction

The anti-inflammatory activities of **Siddha formulation Senkaluneer Chooranam** at a dose of 100 and 200mg/kg were evaluated using carrageenan-induced paw edema method. The inflammation was readily produced in the form of edema with the help of irritant such as carrageenan. Carrageenan is a sulphated polysaccharide obtained from sea weed (Rhodophyceae) and when injected cause the release of prostaglandins by the way it produces inflammation and edema.

Aim of the study

Aim of the Anti-inflammatory study is to evaluate the safety and efficacy of the Siddha drug Senkaluneer Chooranam (SKC) in Albino rats.

Method

Anti-inflammatory activity was performed by the following procedure of Bhandrietal (1) The animals were divided into 4 groups each having six animals. A freshly prepared suspension of carrageenan (1% w/v, 0.1 ml) was injected to the planter region of left hind paw of each rat. One group was kept as control and the animals of the other groups were pretreated with the siddha formulation **Senkaluneer Chooranam** test Compounds dissolved with 2 ml sterile water given through orally 30 min before the carrageenan treatment. The paw volumes of the test compounds, standard and control groups were measured at 60,240,360 minutes of carrageenan treatment with the help of Digital plethysmometer (Ugo basile, Italy). Mean increase in paw volume was measured and the percentage of inhibition was calculated.

% Anti-inflammatory activity = (Vc-Vt / Vc) x 100

Where, ***Vt*** - mean increase in paw volume in rats treated with test compounds,

Vc-mean increase in paw volume in control group of rats.

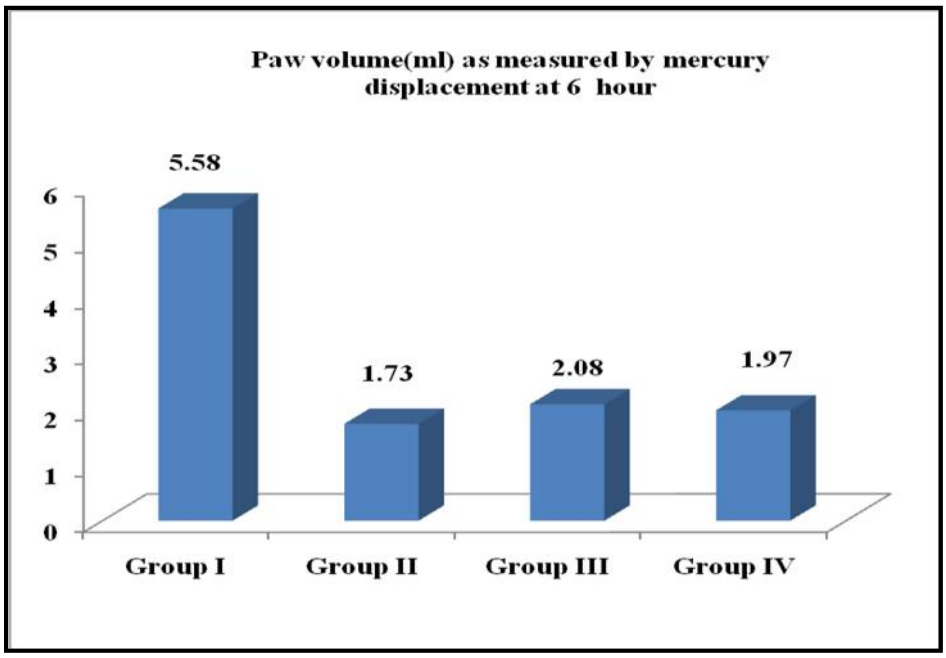
Results

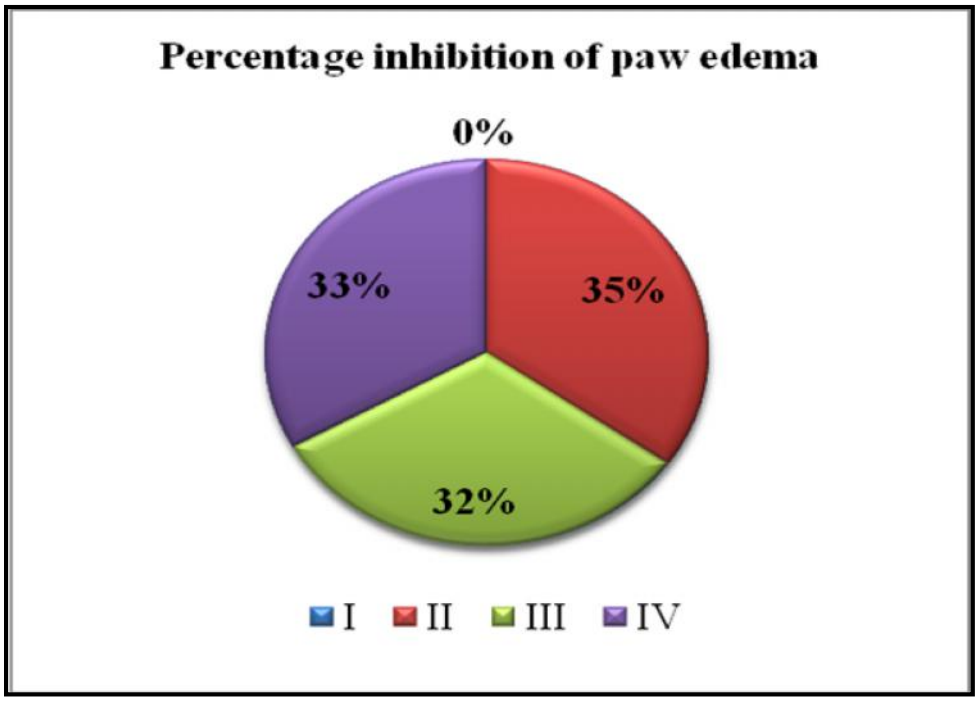
Anti- inflammatory activity

Both doses of siddha formulation **Senkaluneer Chooranam** at 100mg/kg and 200mg/kg were tested for their Anti- inflammatory activity by using carrageenan Induced rat paw edema method and the results are tabulated in table no 1. The results reveals that both doses of siddha formulation **Senkaluneer Chooranam** at 100mg/kg and 200mg/kg doses possesses significant Anti- inflammatory activity when compared to control group at $p < 0.01$.

Table No – 1

Treatment	Dose (mg/kg)	Paw volume(ml) as measured by mercury displacement at 6 hour	Percentage inhibition of paw edema
Group I Normal saline	10ml/kg orally	5.58±0.99	-
Group II Std	10mg/kg I.P.Diclofenac sodium	1.73±0.46	70.36%*a
Group III Senkaluneer Chooranam	100mg/kg. Orally.	2.08±0.51	65.06%*a
Group IV Senkaluneer Chooranam	200mg/kg. Orally.	1.97±0.49	67.04%*a





* Data are expressed as Mean ± S.E.M.
* Data were analyzed by one way ANOVA followed by Newman's keul's multiple range tests, to determine the significance of the difference between the control group and rats treated with the test compounds.
* a Values were significantly different from normal control at $P < 0.01$.

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