

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/342865830>

Effect of Prostaglandin E2 Synthesis of Sudarshana powder in Animal model

Conference Paper · July 2020

CITATIONS

0

READS

69

4 authors:



[W.A.s Saroja Weerakoon](#)

University of Colombo

57 PUBLICATIONS 41 CITATIONS

[SEE PROFILE](#)



[Pathirage Kamal Perera](#)

University of Colombo

240 PUBLICATIONS 552 CITATIONS

[SEE PROFILE](#)



[Dulanie Gunasekera](#)

University of Sri Jayewardenepura

40 PUBLICATIONS 83 CITATIONS

[SEE PROFILE](#)



[Thusharie Sugandhika Suresh Née Malalavidhane T S Suresh](#)

University of Sri Jayewardenepura

95 PUBLICATIONS 447 CITATIONS

[SEE PROFILE](#)

PGE 2 EFFECT- SUDARSHANA POWDER



iCAUST2017

PROCEEDINGS

International Conference on
Ayurveda, Unani, Siddha and
Traditional Medicine
(5th ICAUST 2017)

"Ayurveda: Inspiring Health & Happiness"

Institute of Indigenotis Medicine
University of Colombo
Rajagiriya
Sri Lanka

27th - 29th October 2017

PGE 2 EFFECT- SUDARSHANA POWDER

5th ICAUST 2017 – International Conference – Abstracts

Theme 09

EFFECT ON THE PROSTAGLANDIN IN E₂ SYNTHESIS OF SUDARSHANA POWDER IN ANIMAL MODEL

Weerakoon WASS^{1*}, Perera PK¹, Gunasekera D², Suresh TS³

¹Institute of Indigenous Medicine, University Of Colombo, Rajagiriya, Sri Lanka

²Department of Paediatrics, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka

³Department of Biochemistry, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka

*sarojaweerakoon@yahoo.com

Sudarshana powder (SP) is a very effective anti-pyretic Ayurveda preparation, extensively used in Sri Lanka as well as in India. It contains 53 ingredients with *Andrographis paniculata* (Burm. F.) Nees as the main component. The aim of the present study was to evaluate the Prostaglandin E₂ mechanism of SP on the progression of adjuvant-induced arthritis in rats. Following the ethical clearance, arthritis was induced by a single intra-dermal injection of 0.1 ml of Freund's Complete Adjuvant (FCA) containing 0.05% w/v *Mycobacterium butyricum* suspension into a foot pad of the left hind paw of all groups of Wistar rats except healthy control. There were four experimental groups. Group I was used as the healthy control group. Group II composed of arthritic rats who received distilled water. Group III was arthritic animals treated with a standard non-steroidal anti-inflammatory drug Celecoxib (5 mg/kg) and Group IV was arthritic animals who received SP (0.5 g/kg). Following induction of arthritis, daily oral treatment was started on day 14 and continued up to day 28. Prostaglandin E₂ ELISA kit-Monoclonal is used for the determination of plasma PGE₂ mechanism of SP. All animals were sacrificed on day 29th and blood was collected and indomethacin was added immediately after whole blood collection for plasma for prostaglandin E₂ Enzyme-linked immune sorbent assay (ELISA). Blood was centrifuged at 1500 rpm for 10 min at room temperature. Clear plasma was aliquoted and subjected to prostaglandin E₂ estimation. There was a significant (p<0.001) increase observed in plasma PGE₂ concentrations in AIA control group, when compared to the healthy control group. In the AIA rats treated with Celecoxib and SP showed extremely significant (p<0.001) decreases in plasma PGE₂ concentrations. Therefore ELISA analysis of the inflammatory markers in post treatment plasma samples of AIA rats, showed a significant decrease in serum PGE₂ level in the SP group comparable to the standard drug Celecoxib group.

Keywords: Arthritis, Prostaglandin E₂, *Sudarshana* powder

PGE 2 EFFECT- SUDARSHANA POWDER