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## **Preliminary study of the antiinflammatory effect of an Ayurvedic recipe - Rathakalka**

Rathakalka is being used in children against certain diseases, especially for inflammatory conditions of skin. The present study was undertaken to scientifically prove this fact. Two experiments were carried out using Sprague Dawley albino rats (250-275g) In the first experiment, three groups were used (n=6/group). The rats were orally administered with Rathakalka 312.5 mg/ animal in 2ml of distilled water (Treated-1) , Iburprofen-21.4mg/ animal in 2ml of distilled water (Reference)and 2ml of distilled water (Control-1) before induction of paw edema. In the second experiment, 12 rats were used (n=6 group) . The rats of group one were given 2ml of distilled water (Control -2) while the rats in group two received Rathakalka -312.5 mg/ animal in 2ml of distilled water (Treated-2) twice daily (p/o) for seven consecutive days upto 24h prior to induction of paw edema. Paw edema was induced in rats using 0.05ml of 1% carageenan (s/c). The volume of hind paw was determined by the water displacement technique. The volume of displaced water was considered equivalent to the volume of left hind paw. The paw volume measurements were taken before and after-(at 1,2,3,4,5, 24h) carageenan injection. The edema at each time was calculated in relation to the volume of hind paw before carageenan injection.

In the first experiment, Rathakalka showed its highest antiinflammatory activity at 3h after induction of edema ( $p < 0.05$ , students,  $t$ -test) while Iburprofen elicited its maximum activity at 5h after carageenan treatment ( $p < 0.01$ ). inhibitory activity against carageenan induced paw edema after seven days treatment of Rathakalka at 1,2,3,4,5, and 24h were 41.67, 29.77, 27.63,26.92,41.33 and 49.00% respectively. Seven days treatment of Rathakalka could retain its activity at a higher level even after 24h. Thus the results of the present study justify the use of Rathakalka in the treatment of inflammatory conditions of the skin in children by traditional physicians of Sri Lanka.