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**IN-VIVO INVESTIGATIONS OF CHRONIC INFLAMMATORY PAIN  
MODULATING POTENTIAL OF NIRANTHIN**

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**ABSTRACT**

**Background:** It has been well referred that lignan family of natural products has good pharmacological potential. A lignan, Niranthin, 6-[(2*R*,3*R*)-3-[(3,4-dimethoxyphenyl)methyl]-4-methoxy-2-(methoxymethyl)butyl]-4-methoxy-1,3-benzodioxole] is a common phytoconstituents from various *Phyllanthus* species.

**Objectives:** This study aims to investigate chronic pain modulatory potential of Niranthin.

**Materials and Methods:** We have investigated the effects of Niranthin on chronic thermal and mechanical hypersensitivities in rats, which were injected with 3% carrageenan in the left gastrocnemius muscle and hyperalgesia to heat and mechanical stimuli was assessed before and at varying times after injection, till end of 22 days after muscle insult. Histological changes and the determination of prostaglandin E2 (PGE2) concentration were performed after the completion of drug treatment protocol.

**Results:** Our finding noted that Niranthin causes hypersensitivity activity, when administered intraperitoneally. There was also reduction in prostaglandin E2 (PGE2) concentration observed during our analysis.

