

عنوان مقاله:

Comparative Evaluation of Analgesic Activity of Solenanthus circinatus Ledeb. Root Extract and Fractions in Rat Models of Pain

محل انتشار:

فصلنامه تحقیقات جاری در داروسازی، دوره 6، شماره 3 (سال: 1399)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Solenanthus circinatus root, commonly called "Azaar Choob" in Persian medicine, has a very long history of use in relieving pain and inflammation in muscle contusion and bone bruises and fractures. In this study, the analgesic effect of root extract and various fractions of *S. circinatus* were assessed in male rats using tail flick and formalin tests. Powdered roots of the plant was extracted with ethanol in a soxhlet apparatus and then fractionated with solvents of increasing polarity including petroleum ether, chloroform, ethyl acetate and n-butanol in a liquid-liquid extractor. Ethanolic extract and fractions were then chromatographed on silica gel TLC plates using various solvent systems. The spots on the chromatograms visualized using colour reagents which showed the presence of various compounds. In order to evaluate analgesic effect, rats were treated with 200 mg/kg of extract and fractions intraperitoneally and verified by tail-flick and formalin tests and compared with diclofenac group (25 mg/kg) as a standard drug. Extract and almost all fractions revealed significant analgesic effects compared to the control group. Based on the results, analgesic activity of root extract and fractions of *S. circinatus* were comparable with that of diclofenac. Petroleum ether fraction displayed higher pain relieving activity than diclofenac at 25 mg/kg in tail-flick test. Interestingly the analgesic efficacy of petroleum ether fraction surpassed other fractions at 60 min interval after injection. Ethyl acetate and petroleum ether were found to be superior to other fractions in manifestation of analgesic activity. The root extract .is currently under further detailed investigation

کلمات کلیدی:

Solenanthus circinnatus, Analgesic, Tail-flick test

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