

عنوان مقاله:

Anti-inflammatory and Analgesic Properties of Salvigenin, *Salvia officinalis* Flavonoid Extracted

محل انتشار:

دوفصلنامه طب گیاهی پیشرفته، دوره 2، شماره 1 (سال: 1395)

تعداد صفحات اصل مقاله: 11

نویسندگان:

Amir Hossein Mansourabadi - *Immunology Dept., Shahid Sadoughi University of Medical Sciences, Yazd, I.R. Iran*

Hamid Mohammad Sadeghi - *Physiology Dept, Shahid Sadoughi University of Medical Sciences, Yazd, I.R. Iran*

Nastaran Razavi - *Shahrekord University of Medical Sciences, Shahrekord, I.R. Iran*

Ebrahim Rezvani - *Physiology Dept, Shahid Sadoughi University of Medical Sciences, Yazd, I.R. Iran*

خلاصه مقاله:

Background and aims: Inflammation is one of the defense mechanisms of body and unpleasant sensation of pain is caused by tissue damage. Mostly, inflammation occurs through the release of inflammatory mediators. *Salvia officinalis* is one of the most valuable medicinal kind of mint order. Salvigenin is one of the active flavonoids existing in this plant. The aim of this study was to evaluate the anti-inflammatory and analgesic effect of salvigenin, *Salvia officinalis* flavonoid extracted. **Methods:** In this laboratory experimental study, plant was extracted and the column chromatography was used to purify prepared extracts. 100 male albino mice and 48 male wistar rats were selected. In the hot plate test and in the writhing test, animals were divided randomly into 5 groups. Group 1 (received 10 mg/kg normal saline), groups 2, 3 and 4 (received Salvigenin 25, 50 and 100 mg/kg intraperitoneally, respectively), group 5 (received 10 mg/kg morphine in hot plate test and 10 mg/kg indomethacin in writhing test). In the inflammatory test, animals were divided into 6 groups. Group 1 was assigned as a control group which received 0.5 ml of carrageenin. Groups 2, 3 and 4 (received Salvigenin, at doses of 25, 50 and 100 mg/kg). Group 5 (received 10 mg/kg indomethacin) and then changes of the volume of all groups were measured. Data were analyzed using ANOVA and Tukey test and PResults: In writhing test, Salvigenin reduced the number of abdominal contractions at doses of 50 and 100 mg/kg. Increasing dose of Salvigenin, with reduction in abdominal cramps resulted in the increasing of pain inhibition, and the percentage of this inhibition was statistically significant ($P<0.001$). In hot plate test, also 30, 45 and 60 minutes after injection of Salvigenin and morphine showed significant difference compared to the control group ($P<0.001$). Also, Salvigenin increased the maximum percentage of analgesic compared to the control group ($P<0.001$). Salvigenin could reduce inflammation and in the group that received Salvigenin at 100 mg/kg, the inflammation was significantly lower than the control group ($P<0.05$). **Discussion:** Our findings showed that Salvigenin has dose-dependent analgesic effect so that it can be useful in controlling of inflammations, acute and chronic pain.

کلمات کلیدی:

Salvigenin, Flavonoid, *Salvia officinalis*, Inflammation, Pain

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1224026>

