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Matricaria urea extract exhibits antinociceptive activity in male rat

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Background

The aim of the present study was to explore the probable antinociceptive effects of Hydroethanolic extract of Matricaria urea (Mu) in experimental models of acute pain (Tail flick) and chronic pain (Formalin test).

Materials and methods

Effects of Mu extract were assessed with the antinociceptive effects of sodium salicylate (SS) 200 mg/kg as a positive control. The results are expressed as mean ± SEM and the difference was analyzed by means of ANOVA followed by Tukey test.

Results

Antinociceptive of 200 mg/kg of SS (i.p) had no effect on Tail flick latency, while all doses (250, 500 mg/kg) of extract, increased this latency (at least $p < 0.05$). SS produced antinociceptive only in the Second phases of formalin test ($p < 0.05$), while in the first phase it's not effective. All doses of Mu extract showed a significant effect on both phases of formalin test (at least $p < 0.01$). The lethal dose (LD50) of extract was about 4000 mg/kg.

Discussion

In generally Mu extract has effect on the Tail-flick latency and both phases of formalin test; the site of action is probably central and the mechanism of antinociceptive of extract remains to be elucidated

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