

MEETING ABSTRACT

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Synthesis and study the analgesic and anti-inflammatory effects of rigid benzofurane 3, 4 dihydroxy chalcon (DHC) in mice

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Background

According to bibliography on the structure activity relationship, it seems that the rigid Benzofuran dihydroxy chalcon (DHC) may be more effective on pain and inflammation. In this study the Rigid benzofuran DHC were synthesized and the analgesic and anti-inflammatory effect was evaluated.

Materials and methods

In this study the rigid benzofuran DHC were synthesized and the analgesic and anti-inflammatory effect of different doses, 12.5, 25 and 50 mg/kg, was evaluated by formalin hot plate and caregeenan tests, in group of 7 mice.

Results

The results showed that 3,4-DHC with dose of 25mg/kg induced significant antinociception and anti-inflammation compared with control group. In addition the effect of DHC was higher in the chronic phase of formalin test, therefore it seems that DHC has better anti-inflammatory effect rather than analgesic effect. The dose of 25 mg/kg of DHC induces significant analgesia in hot plate test and anti-inflammatory effect in carageenan test too. The doses of 25 and 50 mg/kg, induced lethargy in mice.

Conclusions

The result showed that with modification of structure of the DHC, this derivative has potential for more studies as a lead compound.

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