***Lantana canescens* (Kunth) inhibits hyperalgesic effect in murine models**

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Introduction: Medicinal plants are commonly used around the world for the treatment or prevention of diseases. Some species of the genus *Lantana* are used for therapeutic purposes. *Lantana canescens* Kunth is popularly known in Brazil as “*cidreirinha*” or “*chumbinho-branco*”, it is found in Pantanal biom and is commonly used for pain relief in the form of infusion (polar fraction), but it has no scientific proof. In the literature there are studies only with its essential oil, which comprises its non-polar fraction. However, to validate the popular use of *Lantana canescens* as an infusion, the anti-hyperalgic effect of its hydroethanolic extract were evaluated.

Methods: The HELc was provided by LAPNEM/UFMS. Protocols approved by Ethics Committee in Animal Use / UFMS (1.039/2019). Male *Swiss* mice weighing 18-25 g were used in the *in vivo* assays. The hyperalgesia were evaluated by abdominal wrinthing and formalina tests. The results were expressed as mean ± E.P.M., ANOVA and Bonferroni test (*p* < 0.05). In the assays, the mice were pretreated orally (p.o.) with water (control) or indomethacin (5 mg/kg, standard anti-inflammatory), or HELc (3, 30 and 300 mg/kg) or morphine intraperitoneally (5 mg/kg, standard analgesic, formalin test).

Results: In the abdominal writhing test, in animals treated with water, the acetic acid induced 87.0 ± 3.4 writhing abdominal episodes. Indomethacin inhibited the episodes by 38.4% (53.6 ± 1.0 writhing abdominal episodes). HELc at doses 3, 30 and 300 mg/kg, inhibited the writhing abdominal episodes by 31%, 41%, and 35%, respectively. In the formalin test, in animals treated with water, the paw licking time was 64.6 ± 13.7 s in the first phase and 215.0 ± 4.8 s in the second phase. Morphine reduced this time by 99.0% in both phases. Indomethacin reduced the paw licking time by 43.3% on the second phase and HELc 3, 30 and 300 mg/Kg reduced by 40.7%, 36.3% and 33.4% respectively, in this same phase of the trial and showed no effect in phase I.

Conclusion: These results confirm the anti-hyperalgesic effects of HELc, validating the use of this plant in folk medicine as an infusion.

Keywords: Pantanal, “*cidreirinha*”, “*chumbinho-branco*”, pain.

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