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Resumo	<p>Bufotenine is an alkaloid derived from serotonin, structurally similar to LSD and psilocin. This molecule is able to inhibit the rabies virus infection in <i>in vitro</i> and <i>in vivo</i> models, increasing the survival rate of infected animals. Being a very promising molecule for an incurable disease and because of the fact that there is no consensus regarding its neurological effects, this study aimed to evaluate chronic treatment of bufotenine on behavior, pathophysiology, and pharmacokinetics of mice. Animals were daily treated for 21 consecutive days with 0.63, 1.05, and 2.1 mg/animal/day bufotenine and evaluated by open field test and physiological parameters during all the experiment. After this period, organs were collected for histopathological and biodistribution analysis. Animals treated with bufotenine had mild behavioral alterations compared to the control group, being dose-response relationship. On the other hand, animals showed normal physiological functions and no histological alterations in the organs. With high doses, an inflammatory reaction was observed in the site of injection, but with no cellular damage. The alkaloid could be found in the heart and kidney with all doses and in the lungs and brain with higher doses. These results show that the effective dose, 0.63 mg/day, is safe to be administered in mice, since it did not cause significant effects on the animals' physiology and on the CNS. Higher doses were well tolerated, causing only mild behavioral effects. Thus, bufotenine might be a drug prototype for rabies treatment, an incurable disease.</p>
Fomento	