



SCNS. 14. Evidence of antidepressant effect of Riparin I, isolated from *Aniba riparia*, in a model depression chronic in mice

OLIVEIRA, I.C.M., VASCONCELOS, A.S., VIDAL, L.M.T., RODRIGUES, F.A.P., SOUSA, F.C.F.

Department of Physiology and Pharmacology, Faculty of Medicine, Federal University of Ceará: Rua Cel. Nunes de Melo 1127, 60430-270 Fortaleza, Brazil
* irisbusy@yahoo.com.br

Introduction: Major Depressive Disorder is one of the most common neuropsychiatric disorders and affects 17-20% of the world population. Despite scientific efforts, its treatment still presents itself with a limited efficacy and a delayed start-up effect. In this context, natural products are a potential source of new drugs. Riparin I (Rip I), one alkaloid isolated from *Aniba Riparia*, has presented promising results. In pre-clinic trials, it has shown predictive effects of antidepressant and anxiolytic activities in acute behavioral models of depression and anxiety. **Objectives:** Facing that, the goal of the trial was to investigate the activity of Riparin I in mice exposed to the model of chronic depression induced by corticosterone (Cort). **Methods:** Swiss female mice, weighing 22-25g, were divided as the following: control group (vehicle - saline, 1% de tween80, 1% de DMSO, s.c., for 14 and 21 consecutive days), stressed group (CORT, 20mg/kg, s.c, for 14 or 21 days), group treated with RipI (50 mg/kg, orally, for 8 days), group treated with fluvoxamine (Flu 50 mg/kg, orally, for 8 days). Treatments started on the 14th day of corticosterone-induced stress until the 21st day. Behavior models analyzed were as follows: tail suspension (TS) and forced swim test (FS). The corticosterone treated group presented a greater immobility time (IT) than the control group (SC: Cont.: 45 ± 7.30 ; CORT.: 108.9 ± 3.5 ; $p < 0.01$). Meanwhile, the groups treated with RipI (50) and Flu(50) presented a smaller IT than the CORT group (SC: CORT.: 108.9 ± 3.5 ; RipI: 49.57 ± 6.6 ; Flu: 42 ± 13.3 ; $p < 0.01$). Depressive behavior was unchanged by corticosterone administration and reverted using RipI and Flu. **Conclusions:** These results allow us to suggest a possible antidepressant effect of RipI in the corticosterone-induced animal depression model.

OLIVEIRA, I.C.M.; VASCONCELOS, A.S.; VIDAL, L.M.T.; RODRIGUES, F.A.P.; SOUSA, F.C.F. 2013. Evidence of antidepressant effect of Riparin I, isolated from *Aniba riparia*, in a model depression chronic in mice, p.24. In: Oriá, Reinaldo Barreto; Andrade, Geanne Matos de; Bruin, Verelice Meireles S. de. **I International Symposium in Neuroscience Meeting** [Blucher Neuroscience Proceedings n.1 v.1]. São Paulo: Blucher, 2014
<http://dx.doi.org/10.5151/isnm-sine19>