

EFFECTS OF GALANIN N-TERMINAL FRAGMENT (1-15) IN THE LIGHT/DARK AND TAIL SUSPENSION TESTS.

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Galanin N-terminal fragment (1-15) [Gal(1-15)] is involved in mood regulation. The intracerebroventricular (icv) administration of Gal(1-15) produces a depressive-like behaviour in the forced swim test (FST) and an anxiety-like behaviour in the open field test (OF) in rats. In this work we analyze the effect of Gal(1-15) in two more behavioural tests, the tail suspension test (TLT) and the light/dark test.

Gal(1-15) (3nmol), effective dose in FST and OF, or artificial cerebrospinal were injected in animals (n=5-8) 15 minutes before the test. Behavioural assessment were conducted with at least one week between tests. Student's *t*-test was used for comparison between experimental groups.

In the light/dark test we analyzed during 5 min three parameters as indicators of anxiety-like behaviour. Gal(1-15) significantly reduced the time spent in the light compartment by 52% ($p < 0.05$) and the latency time for entering the dark box by 65% ($p < 0.05$). An increased in the latency time for re-entering the light box was also observed ($p < 0.05$).

In the TST, total immobility time was analyzed during 6 min test as parameter indicator of depressive-like behaviour. Gal(1-15) significantly increased rat immobility by 16% ($p < 0.05$).

Our results describe that Gal(1-15) exerts strong depressive- and anxiety-like effects in these tests, indicating a potential role of Gal(1-15) in mood disorders. These results may give the basis for the development of novel therapeutic drugs targeting Gal(1-15) for depression and anxiety.

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