31ª SEMANA CIENTÍFICA DO HOSPITAL DE CLÍNICAS DE PORTO ALEGRE

EFFECT OF ANTIPSYCHOTIC IN HIPERACTIVITY INDUCED BY MORPHINE EXPOSURE IN NEONATE RA

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Introduction: The opiate withdrawal symptoms in adult animals are represented by hyperlocomotion and this effect is possibly due to increase dopamine release in SNC. Objectives: determine whether D2-antagonist receptor reverses the hyperlocomotion after morphine exposure in early life. Materials and Methods: were utilized male *Wistar* rats divided in 2 groups: control (C) and morphine (M), which received saline or morphine (5 μ g s.c., mid-scapular) at postnatal day 8 (P8), once a day for 7 days. The behaviors were analyzed at P30 by open field (OF) and elevated plus maze (EP) tests. At 30 min before the tests the groups are divided in 4 groups: M and C (without haloperidol), and M-Hal and C-Hal which received 0.5 mg/Kg i.p. of haloperidol (n=8-15/group). In the OF were analyzed: numbers of rearing (R) and crossing (Cr); and in the EP were analyzed: time spent in the open-arms (OT) and closed-arms (CT) (s), numbers of open-arm entries (OE) and of closed-arm entries (CE). The data were analyzed by one-way ANOVA/SNK and expressed as mean+SEM. Differences were considered significant if P < 0.05. Results and Conclusion: In the OF test M group showed increase in the number of Cr and R in relation to C group, which were reverted by haloperidol (Cr: $F_{3,41} = 10,34$; R: $F_{3,41} = 5,4$; P < 0.01). In the EP test M group showed increase in OT and OE, and decrease of CT in relation to the C group, which were reverted by haloperidol (OT: $F_{3,27} = 10,57$; OE: $F_{3,27} = 14,02$; CT: $F_{3,27} = 3,94$; P < 0.05). This study supports previous works where the morphine stimulates dopaminergic transmission in SNC, which is regarded as the substrate for their motor stimulant effects. Furthermore, this treatment can promote changes for a medium-time in the dopaminergic system. Financial Support: CAPES, GPPG - HCPA, FAPERGS