

Study of the relationship between motor performance and self-efficacy in children's peer relations with ADHD disorder

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Introduction: Research data suggests that children with ADHD disorder in the first minutes of communication are evaluated by peers as unpopular people and matter fields to banishing them from their peers lead to the low self-efficacy may provide \neg . The aim the present study awas to investigate the relationship between motor function (Gross and weak) and self-efficacy in children with ADHD.

Materials and methods: This research is a descriptive - correlation study. The statistical population including 96 children (70 boys and 26 girls) with ADHD from in Zahedan . Motor performance scale Lincon – ozertski and peer relations is self-efficacy questionnaire were used to collect the required data. . Data analyses have done by descriptive and inferential tests (regression) using SPSS-16 software.

Results: The outcomes of this study, have highlighted that that there is a significant correlation between physical performance and self-efficacy in relation with peers in children with ADHD.($p = 0.01$, as well as , the regression analysis has been showed that the predicted movement is the self ($p=0.01$) Conclusion: The increased recovery of motor function, likely , increase confidence and self-efficacy in ADHD children.

Keywords: motor function, self-efficacy, ADHD

Report of some histologic alterations in brain of rat newborns induced by zolpidem treatment during pregnancy

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Introduction. Zolpidem is a new sedative drug with agonistic effect on GABA A receptor on brain. Pregnant women may use zolpidem during pregnancy. Some teratogenic effects of this drug have been noticed in human newborns in some cases reports. The aim of this study is a research on histological effects of zolpidem on newborn rat brain.

Materials and Methods. The pregnant females are randomly classified into four groups:

1-control with saline injection intraperitoneal (i.p), 2-Treated with zolpidem (5 mg/kg, i.p), 3-Treated with zolpidem (10 mg/kg, i.p), 4-Treated with zolpidem (20 mg/kg, i.p).

Saline and zolpidem was injected intraperitoneally from zero day for constitutive 10 days. After all injections finished the rats were allowed to give birth to their newborns. Immediately after birth, newborns were fixed by a fixator

(formalin). Then specimen sectioning and histological analysis were done.

Results. There were differences between control and test group qualitatively but quantitative analysis should be done.

Conclusion. Zolpidem is a sedative drug with agonistic effects on GABA A receptors of central nervous system. It has been shown that this receptor is important in normal development of nervous system and this study indicates that zolpidem treatment during pregnancy may interfere in normal development of nervous system.

Keywords: Zolpidem; GABA A receptors; Teratogen; Newborn

subunit dependent effects of the nicotinic receptors on Behavioral and histochemical impairments induced by amyloid beta in experimental rat model of Alzheimer disease

Narges karimi

Alzheimer's disease is the most common type of dementia in old populations characterized by increased β -amyloid ($A\beta$) deposition and neuronal dysfunction leading to impairment of learning and memory, and the death occurring in 3 to 9 years after the outbreak of its symptoms. Among the many neurotransmitter systems affected by the disease, the nicotinic cholinergic system, because of its participation in the process of learning and memory is of great importance and loss of nicotinic Ach receptors as a procedure in Alzheimer's disease has been proven. In the present study, behavioural effects of the intracerebroventricular administration of two agonists of nicotinic cholinergic receptors, varenicline (0.5 and 2 $\mu\text{g}/\mu\text{l}$) and PNU-282987 (1 and 3 $\mu\text{g}/\mu\text{l}$), on spatial memory induced by intrahippocampal $A\beta(25-35)$ injection was assessed in male rats using radial arm maze and Y maze, and the passive avoidance behaviour using shuttle box and histochemical impairments were studied using congo-red and nissle and localization of $A\beta$ and tau phosphorylation. The results show that the intrahippocampal $A\beta(25-35)$ injected rats exhibit lower spontaneous alternation score in Y-maze task, impaired retention and recall capability in the passive avoidance test, and fewer correct choices and more errors in the radial arm maze task. Moreover, $A\beta(25-35)$ caused some histochemical abnormality in CA1 area of hippocampus (cell death, deposition of β -amyloid, reduction of bcl2/bax ratio and raising of tau phosphorylation) ($P < 0.05$ - $P < 0.001$). Pretreatment of β -amyloid lesioned rat with varenicline and PNU-282987, almost in both doses, improved behavioral and histochemical deficiency significantly ($P < 0.05$ - $P < 0.001$).

Keywords: CA1 region ; tau protein ; varenicline ; PNU-282987