



## بیست و یکمین کنگره بین المللی فیزیولوژی و فارماکولوژی ایران

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Themes :	بیولوژی اعتیاد
Title :	Ecstasy microinjection on spatial memory in male rats
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Abstract :	Background : 3, 4 -Methylenedioxymetamphetamine (MDMA, ecstasy) is an amphetamine derivative whose use has consistently increased over the last years. Ecstasy is a risk factor for earlier onset and/or more severe decline of age-related memory deficits in later years. Purpose: The purpose of this experiment was to investigate the effects of repeated exposure to MDMA on spatial memory. Material and method: 28 male wistar rats were randomly divided into 4 groups (n=7): Control group, sham group which was received saline (%0.9) and two ecstasy treated groups which was received ecstasy (1µg/µL, 0.2µg/µL) for 7 consecutive days. Characteristic of spatial memory was assessed using Morris water Maze for 5 consecutive days following the treatment period. Statistical analysis was performed using analysis of variance (ANOVA). Results: The results of the data analysis speed, there are no significant differences either between groups. The results of the data analysis time, average length of time taken to reach the platform are significant differences between groups (P <0.05). The results of the data analysis distance, average distance traveled to reach the platform were significant differences between groups (P <0.05). Deduction: Results showed that ecstasy treatment induces spatial memory deficits.
Keywords :	Ecstasy, Hippocampus, Spatial memory.