

Short communication

Effect of MPEP in Morris water maze in adult and old rats

Halina Car, Radosław Stefaniuk, Róża J. Wiśniewska

Department of Pharmacology, Medical University of Białystok, Mickiewicza 2c, PL 15-222 Białystok, Poland

Correspondence: Róża J. Wiśniewska, e-mail: rjwis@amb.edu.pl

Abstract:

The present investigation assessed the effects of 2-methyl-6-(phenylethynyl)-pyridine (MPEP) on acquisition and reference memory in the Morris water maze in young adult rats aged 3-month and old rats aged 26-month.

MPEP reduced the swim speed of the young adult rats during acquisition, shortened the distance they covered and reduced their swim speed in the probe trial. The untreated old rats had impaired acquisition of spatial learning, shortened distance and a lower swim speed in the probe trial in comparison with young rats. MPEP did not influence the activity of the old rats in the water maze. In summary, MPEP did not influence acquisition of spatial learning and reference memory in the young adult and old rats.

Key words:

MPEP, adult rats, old rats, Morris water maze