

The Nitric Oxide Donor Molsidomine Antagonizes Age-Related Memory Deficits in the Rat

Nikolaos Pitsikas^{1,2}, Antonello E. Rigamonti² and Eugenio E. Muller²

¹Department of Pharmacology, School of Medicine, University of Thessaly, Larissa, Greece; ²Department of Medical Pharmacology, School of Medicine, University of Milan, Milan, Italy

The effects of the nitric oxide (NO) donor molsidomine on aged rats' cognition were evaluated in two different behavioral tasks: the step-through passive avoidance paradigm and the object recognition test. Post-training injection of molsidomine (4 but not at 2 mg/kg), significantly improved old rats performance in both the behavioral paradigms. These results support and ex-

tend prior findings about the implication of NO in learning and memory mechanisms. In addition, for the first time, a NO donor was found to antagonize age-related performance deficits in memory tasks suggesting that integrity of the NOergic system may be important in brain aging processes.