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Neuroprotection by Brain-Derived Neurotrophic Factor in Experimentally Induced Huntington Disease

Ola E. Mohamed^{1*}, Ahmed M. Fayez¹, Dalaal M. Abdallah², Hanan El-Abhar³

¹Pharmacology and Toxicology Department, Faculty of Pharmacy, MSA University

²Pharmacology and Toxicology Department, Faculty of Pharmacy, Cairo University

³Pharmacology, Toxicology and Biochemistry Department, Faculty of Pharmacy, Future University in Egypt

Huntington Disease (HD) is associated with aberrant multiple targets signaling to hasten neuronal death. In the present study, morin (MH) neuroprotective potential was tested in a model of 3-nitropropionic acid (3-NP)-induced HD. Rats were divided into 3 groups, the 1st served as a normal group, the 2nd received 3-NP for two weeks to induce HD, whereas the 3rd one was injected with both 3-NP and MO. MO was able to reduce motor deficits and enhance the AKT, brain-derived neurotrophic factor (BDNF) cue to boost neuroprotection. Meanwhile, it suppressed the cortical contents of nuclear factor- κ B, interleukin-1 β , tumor necrosis factor- α , and malondialdehyde. It is concluded that MO could hamper HD via enhancing BDNF, as well as its antioxidant and anti-inflammatory effects.

Keywords: Brain, BDNF, Morin, HD

Biography:

Ola Essam Mohamed is a Teaching Assistant at Pharmacology and Toxicology Department, Faculty of Pharmacy, MSA University