Moringa oleifera

The extract of Moringa oleifera (M. oleifera) seeds exerts various pharmacological effects. Our previous study demonstrated that M. oleifera seed extract (MSE) alleviates scopolamine-induced learning and memory impairment in mice. In the present study, we investigate the neuropharmacological properties of 70% ethanolic MSE in the acute and delayed stages of ischemic stroke. MSE may be effective for the prevention and/or treatment of acute ischemic stroke. The most effective dose was 500 mg/kg, and the therapeutic window seemed to be within 4 h after reperfusion. Additionally, we found that MSE treatment improved animal survival, reversed spatial cognitive impairment and promoted hippocampal neurogenesis and neuroplasticity as well as the cholinergic neurotransmission system during the recovery stages of ischemic stroke. Our findings verified that MSE has neuroprotective effects in both the acute and chronic stages of ischemic stroke. The relevant mechanism of protection may occur by promoting hippocampal neurogenesis and synaptic plasticity as well as improving cholinergic function. These findings suggest that M. oleifera seed extract may be a promising neuroprotective agent for the treatment of ischemic stroke [1)].

1)
Zeng K, Li Y, Yang W, Ge Y, Xu L, Ren T, Zhang H, Zhuo R, Peng L, Chen C, Zhou Y, Zhao Y, Li WJ, Jin X, Yang L. Moringa oleifera seed extract protects against brain damage in both the acute and delayed stages of ischemic stroke. Exp Gerontol. 2019 Apr 27. pii: S0531-5565(18)30758-7. doi: 10.1016/j.exger.2019.04.014. [Epub ahead of print] PubMed PMID: 31039389.