

Neuromuscular improvement *Curcuma longa* L. tablets in MPTP-induced mice. (Poster)

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Introduction

Scientific evidences claim that free radicals and reactive oxygen species have been link to aging process and neurogenerative diseases. *Curcuma longa* L. has been shown antioxidant activity.

Objectives

The experiment was performed to prove the neuromuscular function improvement by the antioxidant activity of *Curcuma longa* L. tablets.

Methods

The neuroprotective evaluation was conducted by practicing mice to stay on the rotating cylinder or rotarod (at 20 rpm) for 5 days. Then they were treated with combination of *C. longa* tablets and a dopaminergic neurotoxin MPTP (N-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) and the neuroprotective produced and evaluated.

Results

The treatment was performed for 21 days and it shown that the mice received 100 mg/kg p.o. (172.0 ± 4.90 sec) and 1000 mg/kg p.o. (141.93 ± 13.49 sec) *C. longa* tablets after MPTP injection, motor deficits were significantly improved while compared to saline-treated mice (77.73 ± 20.77 sec) and placebo-treated mice (81.13 ± 27.29 sec).

Conclusion

The result provides experimental evidence, showing that *C. longa* tablet was able to significantly protection the muscular oxidative stress, caused by neurotoxin, by increase in motor performance test, which could be attributed to its antioxidant activity.

Keywords: antioxidant activity, *Curcuma longa* L. tablets

Selected References

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