

Effect of *Celastrus paniculatus* seed oil (Jyothismati oil) on acute and chronic immobilization stress induced in swiss albino mice

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ABSTRACT

Stress alters the homeostasis and is produced by several factors. Immobilization stress induced due to reduced floor area provided for the mobility results in the imbalance of oxidant and antioxidant status. The modern computer savvy world decreases human mobility in the working environment, leading to the formation of oxygen free radicals and if left untreated might result in severe health problems like hypertension, cardiovascular disease, premature aging and brain dysfunction. Hence, modern medicines rely upon the medicinal plants for some drugs with zero side effects. In this context, Jyothismati oil (JO), extracted from *Celastrus paniculatus* seeds, was used to treat acute and chronic immobilization induced experimentally. *C. paniculatus* plant is considered to be rich in antioxidant content and so the seed oil extract's efficacy was tested against immobilization stress in albino mice. The animals were kept in a restrainer for short and long durations, grouped separately and fed with the drug. Animals were sacrificed and the samples were analyzed. The antioxidant enzyme levels of the animals regained and markedly increased in the acute and chronic immobilized groups, respectively. The results suggested that the extract of *C. paniculatus* seed was highly efficacious in reducing the stress induced by least mobility for hours.

KEYWORDS

Antioxidants . *Celastrus paniculatus* . free radicals . oxidative damage

REFERENCES

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