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Screening of antidepressant activity of *Celastrus paniculatus* Willd whole plant extracts in albino mice

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The objective of the present study was to evaluate the antidepressant, MAO inhibitory and antioxidant activity of methanolic and aqueous extract of *Celastrus paniculatus* Willd whole plant. Depression is the most common feature of many individuals in their life time at least once; it may vary from mild to severe. As per WHO, depression is the second major cause of premature death by 2020. *Celastrus paniculatus* woody liana is commonly known as Intellect Tree and Jyothismati. Present study was undertaken to assess the antidepressant effect of methanolic and aqueous extract of *Celastrus* whole plant with the doses of 100 mg/Kg, 200 mg/Kg and 400 mg/Kg using parameters like behavioral despair test and tail suspension test. Significant decline in the immobility time ($p < 0.01$) & ($p < 0.006$) was observed with the higher doses on continuous administration of extract for 7 days. The aqueous extract showed higher significance than the methanolic extract. The antidepressant activity of extract was compared against a standard drug imipramine (20 mg/Kg). To establish the probable mechanism of action as per theories, estimation of 5-HIAA (5-Hydroxy indole acetic acid) and in vivo antioxidant studies (rat brain) were performed. 5-HIAA levels were compared with standard moclobemide (100 mg/Kg) antioxidant studies were compared with the standard Mentat (200 mg/Kg). Significant decrease in the 5-HIAA levels and increased antioxidant activity was observed. The results of the study indicated the potential use of this extract in the treatment of depression.

Biography

J Anantha Lakshmi has completed her MPharm in 2000 from College of Pharmaceutical Sciences, Manipal. She is working in Sri Venkateshwara College of Pharmacy since 14 years. She is pursuing her PhD from Jawaharlal Nehru Technological University, Hyderabad. She has 7 paper publications in peer reviewed journals.

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