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REVIEW ARTICLE

Antidepressant activity of *Chrysanthemum morifolium* Linn in mice

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ABSTRACT:
Depression is the common symptom in today's scenario. The Ethanolic extract of *Chrysanthemum morifolium* Linn (EECM) contains flavonoids compound which has shown therapeutic potential in neurological diseases. The study was undertaken to evaluate antidepressant activity of EECM using Despair Swim Test (DST) and Tail Suspension Test (TST). The Swiss Albino mice weighing about 20-25 gm were used. The animals were divided into 4 groups, each group comprising of 6 animals, (n=6). Group I was control received Distilled Water (10ml/kg per oral), Group II Standard Imipramine HCl (10gm/kg per oral) and Group III and IV Test group, receives EECM (250 and 500 mg/kg per oral respectively). All drugs were administered for 10 days. The results were analysed using one way ANOVA followed by Dunnetts test, $p<0.05$ was considered as significant. The effect of EECM on immobility periods of mice were assessed in DST and TST. The effect of EECM was compared with that of control. The effect of 500mg/kg showed significant reduction in immobility time of mice in both DST and TST. The present study suggests that possible antidepressant activity of EECM in mice on the 500mg/kg drug administration is more than 250mg/kg.

KEYWORDS: *Chrysanthemum morifolium Linn*, Imipramine HCl, Despair Swim Test, Tail Suspension Test.

INTRODUCTION:
Depression is common, chronic, recurring disorder with some property like low cognitive and emotional reaction that imposes high expanses to patients and remedial system. Depression is common disorder with prevalence of about 15% during lifecycle and today it is considered as main reason of disability around world and is in 4th rank among 10 main reason of world load disease[1]. Depression affects not only patients but also their friends and families. Social withdrawal, lack of motivation, sexual dysfunction, sleep disorder (in 75% of patient), depressed mood are main symptoms of depression[2].

Depression is a significant contributor to the global burden of disease and affects people in all communities across the world. There are several types of depression. A person with major depression experiences symptoms of depression that last for more than two weeks. A person with dysthymia experiences episodes of depression that alternate with periods of feeling normal. A person with bipolar disorder, manic-depressive illness, experiences recurrent episodes of depression and extreme elation. A person with Seasonal Affective Disorder (SAD) experiences depression during the winter months, when day length is short. Although the exact cause of depression is unknown, research suggests that depression is linked to an imbalance of the neurotransmitters serotonin, norepinephrine, and dopamine in the brain[3]. Factors that may contribute to depression include heredity, stress, chronic illnesses, certain personality traits (such as low self-esteem), and hormonal changes[4].

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