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**Original article**

**An experimental study to evaluate the anticonvulsant activity of SSRI (Fluoxetine, Citalopram) and SNRI (Venlafaxine) in albino mice**

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**Abstract**

**Background:** One of the challenges faced today by physicians is to understand the exact etiology and pathophysiology of epilepsy and its successful treatment. In recent years there has been increasing evidence that serotonergic neurotransmission modulates a wide variety of experimentally induced seizures. The 5-HT can cause a significant shift of excitability in most networks involved in epilepsy and thus drugs that alter the concentration of 5-HT or exert serotonin receptor agonist and/or antagonist properties can be considered as important factors for the pathogenesis of epilepsies. The association between epilepsy and depression has been known since antiquity. Noradrenergic and/or serotonergic deficits, as well as other abnormalities, may contribute to a predisposition to some epilepsy and depression. Our objectives were to study anticonvulsant activity of SSRIs (Fluoxetine, Citalorpam) and SNRI (Venlafaxine) by maximal electroshock method (MES) and pentylenetetrazol (PTZ) induced seizure model.