Effects of the antidepressant drugs clomipramine and mianserin on tryptophan hydroxylase activity in the rat brain, measured at two points in the light/dark cycle

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Abstract:

Tryptophan hydroxylase activity has been measured in synaptosomal preparations from rat brain. A significant circadian variation in enzyme activity was apparent in corpus striatum, (p < 0.001), brainstem and cortex (p < 0.01). A single dose of clomipramine or mianserin (20 mg/kg) had no effect on brainstem enzyme activity measured at mid-light or mid-dark. Chronic administration (7.5 mg/kg i.p. twice daily for 2 weeks) of either clomipramine or mianserin significantly increased enzyme activity. There was no significant difference between the drug effects measured at mid-light or mid-dark.