Biomedical Abstract

This study re-examined the hyperactivity and disruption of ***prepulse inhibition*** induced by **N-methyl-D-aspartate** stimulation ... of the rat ventral hippocampus and compared how both effects were affected by pretreatment with either haloperidol or clozapine. While the hyperactivity is thought to depend on dopamine receptor activation in the nucleus accumbens, the dopamine D2-class receptor blocker haloperidol failed to antagonize the disruption of ***prepulse inhibition*** in previous studies. However, an ameliorative effect of the atypical neuroleptic clozapine on disruption of ***prepulse inhibition*** was suggested by ... In the present study, bilateral infusion of **N-methyl-D-aspartate** ... into the ventral hippocampus of Wistar rats increased ... disrupted ***prepulse inhibition***. Both effects were observed immediately after infusion but disappeared 24h later. Injection of .., 45min prior to **N-methyl-D-aspartate** infusion, totally antagonized the hyperactivity but did not affect the disruption of ***prepulse inhibition***. We conclude that dopaminergic mechanisms are differentially involved in the hyperactivity and disruption of ***prepulse inhibition*** induced by **N-methyl-D-aspartate** stimulation of the ventral hippocampus.

Inputs

1. Supporting Sentences
2. Regulated Entity: ***prepulse inhibition***
3. Regulator Entity:**N-methyl-D-aspartate**

Outputs

1. Mechanism Sentence
2. Relation: negative-activation