



## Neurology/NeuroSurgery

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### **Clorazepate Dipotassium**

Clorazepate Dipotassium is a benzodiazepine anxiolytic with sedative/hypnotic and anticonvulsant properties. The subcortical levels (primarily limbic, thalamic, and hypothalamic) of the CNS are depressed by Clorazepate and other benzodiazepines thus producing the anxiolytic, sedative, skeletal muscle relaxant, and anticonvulsant effects seen. The exact mechanism of action is unknown but postulated mechanisms include antagonism of serotonin, increased release and/or facilitation of gamma aminobutyric acid (GABA) activity, and diminished release or turnover of acetylcholine in the central nervous system.

Clorazepate has found use in the canine species as an adjunctive anticonvulsant and in the treatment of behavioral disorders associated with anxiety or phobia-related change. Clorazepate is the most rapidly absorbed benzodiazepine. As such, it has a rapid onset of action. Peak serum levels generally occur within 1-2 hours. Clorazepate is metabolized to Desmethyldiazepam and other metabolites. Desmethyldiazepam is active and has a very long half-life. Clorazepate is contraindicated in patients with hypersensitivity to other benzodiazepines. Clorazepate should be used cautiously in aggressive patients as it may disinhibit the anxiety that may help prevent these animals from aggressive behavior. Benzodiazepines have also been reported to exacerbate myasthenia gravis. Safety during pregnancy and lactation is not known, and the use of Clorazepate during these times is discouraged.