



## Neurology/NeuroSurgery

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### **Hydroxyurea**

Hydroxyurea is an antineoplastic agent. The exact mechanism of action of Hydroxyurea has not been determined. It appears to interfere with DNA synthesis without interfering with RNA or protein synthesis. Hydroxyurea is useful in the treatment of polycythemia vera, mastocytomas, and leukemias in dogs and cats. Hydroxyurea is currently being utilized as an agent, which may potentially aid in the adjunctive treatment of canine meningiomas.

Adverse effects of Hydroxyurea include anorexia, vomiting, diarrhea, and stomatitis, sloughing of nails, alopecia, and dysuria. Hydroxyurea is a teratogen and should not be used during pregnancy or nursing. The most serious adverse effect associated with hydroxyurea is bone marrow suppression characterized by anemia, thrombocytopenia, and leukopenia. Frequent blood count and liver assessments will accompany its use.

The use of gloves during administration is recommended, especially when the administering individual is immuno-compromised or pregnant. Children should not handle the drug.