Antidepressant (Tricyclic) Toxicity in Dogs and Cats

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Toxin
Tricyclic antidepressants (TCA)

Source
Medications such as imipramine, desimipramine, trimipramine, amitriptyline, and doxepin. Trade names include Asendin, Elavil, Endep, Etrafon, Limbitrol, Ludiomil, Norpramin, Pamelor, Sinequan, Tofranil, Triavil, and Vivactil.

General Information
The tricyclic antidepressants affect the central nervous system (CNS) by inhibiting the normal function of the neurotransmitters serotonin and norepinephrine. Different TCAs affect different neurotransmitters in different ways. Animals should be monitored for at least 12 hours after ingestion even if no signs are present. Sudden death, several days after apparent recovery has been reported in humans.

Toxic Dose
Varies depending upon the specific TCA.

Signs
Vomiting, disorientation, anxiety, aggression, depression to semicomatose states, seizures, change in body temperature, ataxia, weakness, tremors, abnormal heart rhythms, facial or lingual (tongue) edema, rash, urticaria, pulmonary edema, and death.

Immediate Action
Seek veterinary attention. Your veterinarian may recommend inducing vomiting depending on the pet's level of alertness.

Veterinary Care
General treatment: Depending on the pet's level of alertness, the induction of vomiting may be continued, gastric lavage is performed, and activated charcoal is administered.

Supportive treatment: Seizures are controlled with anticonvulsants or inhalant (gas) anesthesia. Normal body temperature is maintained, and the pet is monitored and treated for heart rhythm abnormalities. Blood gases are monitored and metabolic acidosis treated if present.

Specific treatment: Unavailable.

Prognosis
Variable