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A quick summary of the toxicity of *Atropic Alkaloids* in animals

Jay K. Desai and Seema Kumari Bishnoi

The most important of the belladonna or solanaceous alkaloids are atropine, hyoscyamine and hyoscine. These alkaloids are obtained from *Datura stramonium*, *Hyoscyamus niger* and *Atropa belladonna*.

Occurrence

1) Ingestion of plants
2) Administration of excess dose of atropine sulphate.

Symptoms

1. Paralysis, convulsion, and staggering.
2. Ataxia, restlessness, and muscular trembling
3. Dilated pupils and blindness.
4. Subnormal temperature.
5. Thirst, dysphagia, and dryness of the mouth
6. Increase respiration rate and pulse rate.
7. Weak and slow respiration.
8. Respiratory failure led to death.

Post-mortem lesion: Lesion are not characteristics.

Chemical tests

1. Mydriatic effect: young cats, dogs, or rabbits are given a drop of the patient's urine instilled into one eye, and the animal is then housed in a dark environment for 30 minutes. then examine the eye in bright light. In successful circumstances, the treated eye's pupil will be fully dilated while the other eye will react normally.
2. Gerrard's test: A portion of the residue is mixed with a 2% solution of mercuric chloridein 50% alcohol. Atropine instantly produces a red color. Hyoscyamine has a yellow tint that changes to crimson when heated.
3. Bromine test: A yellow amorphous precipitate is created when bromine-saturated hydrobromic acid is dissolved in water. After a short while, this precipitate transforms into crystals with a variety of shapes, including spindles, crosses, and stars.

Treatment

1. Emetics and purgatives.
2. Symptomatic treatment should be given in animals.
3. Physostigmine and pilocarpine like cholinergic drugs never given because of it causerespiration depression.