Emergency Drug: Atropine Sulfate

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| Drug | Atropine Sulfate |
| Uses | * Can be used as a preanesthetic to prevent or reduce secretions of the respiratory tract
* Treat sinus bradycardia, sinoatrial arrest, and incomplete AV block
* Differentiate vagally-mediated bradycardia from other causes
* As an antidote for overdoses of cholinergic agents
* As an antidote for organophosphates, carbamate, muscarinic mushroom, blue-green algae intoxication.
* Hypersialism; reduce secretions
* Treatment of bronchoconstrictive disease
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| Adverse Effects | * GI effects including dry mouth, increased viscosity of secretions, dysphagia, constipation, vomiting, and thirst.
* Genitourinary effects may include urinary retention or hesitancy.
* CNS effects may include stimulation, drowsiness, ataxia, seizures, and respiratory depression.
* Ophthalmic effects include blurred vision, pupil dilation, cycloplegia, photophobia, and increase in intraocular pressure.
* Cardiovascular effects include sinus tachycardia, increased myocardial work and oxygen consumption, bradycardia, hypotension, arrythmias and circulatory failure.
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| Contraindications/ Precautions/ Warnings/ Drug Interactions | * Should not be used in patients with narrow angle glaucoma, synechiae, hypersensitivity, to anticholinergic drugs, tachycardias secondary to thyrotoxicosis or cardiac insufficiency, myocardial ischemia.
* Unstable cardiac status during acute haemorrhage, GI obstructive disease, paralytic ileus, severe ulcerative colitis, obstructive uropathy and myasthenia gravis.
* Antimuscarinic agents should be used with extreme caution.
* The following drugs should be avoided:
* Amantadine
* Anticholinergic agents
* Anticholinergic muscle relaxants
* Antihistamines
* Meperidine
* Phenothiazines
* Procainamide
* Primidine
* Alpha 2 agonists
* Amitraz
* Antacids
* Corticosteroids
* Ketoconazole
* metoclopramide
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| Withdrawal Period | * Meat: 14 days
* Milk: 3 days
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| Dosage | * 0.04mg/kg
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| Concentration | * 0.54mg/ml
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**Drug Dosage calculation for Each Animal:**

Dose x Weight/ Concentration of Drug

**Scenario 1:**

2-week-old Saanen 5kg

0.04mg/kg X 5kg / 0.54mg/ml

=0.37ml

**Scenario 2:**

6-month-old calf 60kg

0.04mg/kg X 60kg / 0.54mg/ml

= 4.44ml

**Scenario 3:**

2-year-old breeding ram 72kg:

0.04mg/kg X 72kg / 0.54mg/ml

= 5.33mls