Emergency Drug: Atropine Sulfate

|  |  |
| --- | --- |
| 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 |
| 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. |
| 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 |
| Withdrawal Period | * Meat: 14 days * Milk: 3 days |
| Dosage | * 0.04mg/kg |
| Concentration | * 0.54mg/ml |

**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