ATROPINE SULFATE*

Classification:  
- Parasympathetic blocking agent
- Cholinergic blocking agent
- Antidyssrhythmic agent

Actions:  
- Inhibits parasympathetic stimulation by blocking acetylcholine receptors
- Decreases vagal tone resulting in increased heart rate and AV conduction
- Allows bronchial dilation and decreases respiratory tract secretions
- Decreases gastrointestinal secretions

Indications:  
- Symptomatic bradycardia
- Asystole, agonal, PEA (<60 beats/min)
- Organophosphate (pesticide/nerve agent) poisoning

Contraindications:  
- Neonates

Adverse Effects:

<table>
<thead>
<tr>
<th>Cardiovascular</th>
<th>Neurological</th>
</tr>
</thead>
<tbody>
<tr>
<td>tachycardia</td>
<td>seizures</td>
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<tr>
<td>increased myocardial O₂ demand</td>
<td>confusion</td>
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<tr>
<td>mucus plugs</td>
<td>dilated pupils</td>
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<tr>
<td>Gastrointestinal</td>
<td>General</td>
</tr>
<tr>
<td>difficulty swallowing</td>
<td>hot, dry skin</td>
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<tr>
<td>dry mouth</td>
<td>worsens glaucoma</td>
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</tbody>
</table>

Administration:

**Adult- Organophosphate (nerve agent) Poisoning**
- 2mg IVP, IM or 4mg ET.
- May repeat IVP/IM/ET dose every 5 minutes until patient is breathing adequately and secretions begin to dry.

**Pediatric >1 month:**  
**Do not Administer Atropine to Neonates**

Organophosphate (pesticide/nerve agent) Poisoning  
- Minimum single dose 0.1mg - maximum single dose 2mg
- 0.05mg/kg IVP, IM, or 0.1mg/kg ET.
- May repeat IVP/IM/ET dose every 5 minutes until patient is breathing adequately and secretions begin to dry.

Onset: 2 - 5 minutes

Duration: 20 minutes

Precautions:  
- Administer supplemental oxygen and monitor rhythm frequently. The increased heart rate may increase myocardial oxygen demand and result in ischemia and dysrhythmias.

Note:  
- Atropine is not recommended in asymptomatic bradycardia. The increase in myocardial oxygen demand may cause or extend a myocardial infarction. May cause paradoxical slowing of heart rate if less than the therapeutic dose is given; Minimum dose is 0.3mg in adults and 0.1mg in pediatric patients.

Worsens glaucoma due to pupillary dilation.

Pupil reaction may not be a reliable indicator for hypoxic brain damage after atropine administration.

High doses of atropine may be required in organophosphate poisoning.

Use 1mg/ml preparation for IM administration and 1mg/10ml preparation for IVP/ET administration. May need to use the 1mg/ml preparation and dilute with NS for any dose that exceeds recommended ET administration volume (minimum 2ml - maximum 10ml).

Signs/Symptoms of Organophosphate Poisoning: Tearing of eyes, ataxia, hypotension, wheezing, seizures, confusion, abdominal cramps, watery nasal discharge, nausea/vomiting, loss of reflexes, generalized weakness, constricted pupils, bradycardia, diarrhea, extreme salivation, sweating, and urination.

*This card is modified to identify use of this drug as part of a nerve agent antidote regimen.