

ATROPINE SULFATE EMSAC August 2023

ACTION: Anticholinergic (Vagolytic)

- Blocks acetylcholine receptors resulting in reduction of parasympathetic tone and increased conduction through the AV node.
- Increases sinus node automaticity and AV conduction when suppressed by abnormal parasympathetic or vagal discharges.
- Antagonizes action of organophosphate agents.

INDICATIONS:

- Symptomatic bradycardia.
- Organophosphate or carbamate insecticide or nerve agent exposure.

CONTRAINDICATIONS:

- Atrial fibrillation or atrial flutter
- Glaucoma

POTENTIAL SIDE EFFECTS:

- Increase heart rate causing tachycardias. • Doses lower than 0.5 mg can
- Post-atropine tachycardias can precipitate V-Fib produce slowing of the heart. or V-Tach.
 - Dilated pupils.
- Can worsen patient's ischemia or extend size of • Decreased salivation. infarct. •
Flushed, hot skin.
- Dry mouth.

ADULT DOSE/ROUTE:

- ⇒ **Symptomatic Bradycardia:** 1mg IVP or IO. May repeat every 5 min up to 3 mg if no resolution of bradycardia.
- ⇒ **Organophosphate Poisoning/Nerve agent Exposure:** 2 – 5mg IVP or IO. May repeat in 5 minutes until symptoms improve (i.e. bronchorrhea resolves). No max dose.

PEDIATRIC DOSE/ROUTE:

- ⇒ **Symptomatic Bradycardia:** 0.02 mg/kg IVP or IO (min dose 0.1mg, max single dose 0.5mg)
- ⇒ **Organophosphate Poisoning:** 0.02 mg/kg IVP or IO (min dose 0.1mg, no max dose). May repeat every 5 minutes until symptoms improve (i.e. bronchorrhea resolves).

NOTES:

- External pacing is the treatment of choice for symptomatic bradycardia if there is suspected myocardial ischemia, or 2nd or 3rd degree AV blocks are present.
- Can be given IM in thigh for suspected organophosphate poisoning /nerve agent exposure.

- Note: the primary cause of bradycardia in pediatric patients is hypoxia.
Atropine is no longer recommended for adult or pediatric asystole.

Effective: xxxxxxxx
Supersedes: 11/1/17

DRAFT