**OTHER NAMES**
Protopam® chloride, 2-PAM

**CLASSIFICATION**
Antidote - Anticholinesterase antagonist

**INDICATIONS FOR IV USE**

**HEALTH CANADA APPROVED**
- In conjunction with atropine in the treatment of anticholinesterase drug or chemical poisoning/overdose. Primarily used for organophosphate insecticides with anticholinesterase activity (e.g. malathion, parathion).
- Management of overdose of anticholinesterase drugs used to treat myasthenia gravis. However it is only moderately effective and its use is not generally recommended.

**CONTRAINDICATIONS**
- None when used as indicated.

**CAUTIONS**
- Pralidoxime is not effective in the treatment of poisoning due to phosphorus, inorganic phosphates, or organophosphates without anticholinesterase activity.
- Myasthenia gravis: may cause myasthenic crisis.
- Renal impairment: dose reduction required.

**DRUG INTERACTIONS:**
- Carbaryl poisoning, (e.g. Sevin®): may increase toxicity. Do not use pralidoxime.
- Succinylcholine: potential prolonged duration of paralysis.

**PREGNANCY/BREAST FEEDING**: Contact pharmacy for most recent information.

**ADMINISTRATION**

<table>
<thead>
<tr>
<th>MODE</th>
<th>DIRECT INTO IV TUBING</th>
<th>INTERMITTENT INFUSION</th>
<th>CONTINUOUS INFUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO MAY GIVE</td>
<td>All registered nurses</td>
<td>All registered nurses</td>
<td>All registered nurses</td>
</tr>
<tr>
<td>ADULT</td>
<td>Over at least 2 minutes. Max rate: 500 mg/minute.</td>
<td>Dilute in 50 - 100 mL NS minibag. Infuse over 15 - 30 minutes.</td>
<td>Dilute 10 g to 500 mL NS or 5 g to 250 mL NS for 20 mg/mL. Infuse at prescribed rate.</td>
</tr>
<tr>
<td>PAEDIATRIC</td>
<td>Over 5 minutes.</td>
<td>As above.</td>
<td>Dilute to 10 to 20 mg/mL NS. Infuse at prescribed rate.</td>
</tr>
<tr>
<td>NEONATE</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
</tbody>
</table>

**REQUIREMENTS**
- None

**MONITORING**

**REQUIRED**
- None

**RECOMMENDED**
- None

**RECONSTITUTION**
- Available as 1 g vial. Reconstitute each 1 g vial with 20 mL sterile water. Resulting solution contains pralidoxime chloride 50 mg/mL. A reconstitution device may be used when mixing solutions for infusion.
COMPATIBILITY/STABILITY
- Compatible with NS.¹
- Limited stability information available; prepare infusions just prior to administration. A reconstitution device may be used.⁵
- For drug-drug compatibility, contact drug information.

ADVERSE EFFECTS
- It is very difficult to differentiate the side effects produced by pralidoxime from those of atropine or the organophosphate compounds.⁸ The following side effects have been reported from large doses in normal volunteers.¹
- Transient bradycardia, thought to be due to too rapid administration, i.e. greater than 500 mg/minute.
- Dizziness, headache, nausea.
- Blurred vision, diplopia, impaired accommodation.

DOSE
- Atropine must be given before pralidoxime but after adequate ventilation has been established.¹
- Cholinergic crisis from lipophilic compounds (like chlorfenvinfos) may be delayed from 2 to 5 days, and can recur up to several weeks after apparent improvement with some compounds (fenthion, fenitrothion, chlorpyriphos).⁷ Physician should contact Drug & Poison Information Centre, Vancouver, for most recent information.

ADULT Poisoning:⁴,⁶,⁸
- 1 g initially. Repeat in 30 - 60 minutes if indicated. Double dose for overwhelming toxicity.
- If no improvement is noted after the second dose, administer 0.5 g/hour as a continuous infusion. Alternatively 1 - 2 g can be given every 6 - 12 hours.
- Treatment may be required for 48 hours or more.²

PAEDIATRIC Poisoning:
- 20 - 50 mg/kg as initial dose.¹ Repeat in 30 - 60 minutes if indicated.
- If no improvement is noted after the second dose, administer 10 - 20 mg/kg/hr as a continuous infusion.⁴ Alternatively 25 - 50 mg/kg can be given every 6 - 12 hours.³

NEONATE
- No information available at this time.

RENAL IMPAIRMENT ADJUSTMENTS
- Reduce dose in renal impairment.² No guidelines currently available.

HEPATIC IMPAIRMENT ADJUSTMENTS
- No information available at this time.

HEMO/PERITONEAL DIALYSIS
- No information available at this time.
PRALIDOXIME CHLORIDE - REFERENCES

5. In house stability data, Pharmacy department, GVHS. 30 July 1996. (on file)

References available in Pharmacy