**CHEMPACK ADMINISTRATION**

**Clinical Indications for Administration of Atropine and Pralidoxime by Auto-Injector**

|  |
| --- |
| * An unexplained multi-casualty incident (MCI)
* Symptoms of nerve agent toxicity or organophosphate poisoning
* According to the 2010-1 EMSPC Standards Manual, the administration of Atropine and Pralidoxime by auto-injector is a required skill for the EMR, EMT, Advanced EMT and Paramedic.
* The EMR, EMT and AEMT must obtain EMS Bureau-specified “Just in Time” training prior to auto injector use
 |

**PROCEDURE GUIDELINES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **R- EMR** | **E – EMT** | **A-AEMT** | **P-PARAMEDIC** | **\*\*M-Medical Control \*\*** |

**\*\*\*Higher level providers are responsible for lower level treatments\*\*\***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |  |
| --- | --- | --- |
| MILD SYMPTOMS Blurred vision, miosis (pinpoint pupils) Excessive, unexplained teary eyes Excessive, unexplained runny nose Increased salivation such as sudden drooling Chest tightness or difficulty breathing Tremors throughout the body or muscular twitching Nausea and/or vomiting Unexplained wheezing, coughing or increased airway secretions Acute onset of stomach cramps Tachycardia or bradycardia SEVERE SYMPTOMS Strange or confused behavior Severe difficulty breathing or copious secretions from lungs/airway Severe muscular twitching and general weakness Involuntary urination and defecation Convulsions Unconsciousness INITIAL DOSAGE FOR SEVERE SYMPTOMS: 0-2 years of age : 1 dose of both Atropine and Pralidoxime 2-10 years of age: 2 doses of both Atropine and Pralidoxime >10 years of age: 3 doses of both Atropine and Pralidoxime INITIAL DOSAGE FOR MILD SYMPTOMS: 0-2 years of age : None 2-10 years of age: None >10 years of age: 1 dose of both Atropine and PralidoximePOTENTIAL SIDE EFFECTS: * Hypertension
* Tachycardia
* Chest pain/angina
* Urine retention

|  |
| --- |
|  |

 | **P** |

|  |  |
| --- | --- |
| CONTRAINDICATIONS: None if severe symptoms are present PRECAUTIONS: Use appropriate PPE, including respiratory protection Ensure patient decontamination Only providers in appropriate PPE should treat patients prior to decontamination 1. Atropine and Pralidoxime may be administered as a single auto-injector (e.g., DuoDote) or as separate auto-injectors (e.g., Mark I Kit). 2. Before administering Atropine and Pralidoxime, the provider must receive training and  demonstrate competency in the following:  a. Pharmacology of the drug  b. Drug indications  c. Drug contraindications of  d. Specific route of drug administration  e. Manufacturer’s instructions 3. Procedure:  a. Ensure scene safety, proper PPE and initiate decontamination as indicated. Decontamination should include removal of clothing and washing with soap and large amounts of water.  b. Confirm the patient has or may have been exposed to a nerve agent or organophosphates.  c. Determine the presence of mild or severe symptoms.  d. Suction airway as necessary.  e. Administer high flow oxygen and assist ventilation as necessary.  f. Explain the procedure to the patient or family, if able.  g. Confirm the patient’s age, if able.  h. Obtain verbal consent, if able.  i. Administer Atropine and Pralidoxime. 1.When severe symptoms are present: • 0-2 years of age: 1 dose • 2-10 years of age: 2 doses in rapid succession • >10 years of age: 3 doses in rapid succession 2) When mild symptoms are present **AND patient is >10 years of age**, give 1 dose. 3) If a patient with initially mild symptoms later develops severe symptoms, give Atropine and  Pralidoxime: • 0-2 years of age: 1 dose • 2-10 years of age: 2 doses in rapid succession • >10 years of age: 2 additional doses in rapid succession  | **P** |

|  |  |
| --- | --- |
|  j. Continue your assessment and treatment of the patient, including airway management.  k. If the patient continues to have severe symptoms 10 minutes after receiving Atropine and Pralidoxime, administer additional Atropine per local protocol. Emergency Medical Responders, EMTs and Advanced EMTs may only administer Atropine using an auto-injector.  l. If the patient develops seizures, administer a benzodiazepine (e.g., Diazepam/Valium) per local  protocol. Emergency Medical Responders, EMTs and Advanced EMTs may not administer  benzodiazepines.  m. At an MCI event, label the patient’s forehead to indicate they have received a MARK 1 Kit or DuoDote by writing “MARK 1”, “DuoDote”. Indicate the number of doses and the time(s) of  administration. If using triage tags, document the same information on the triage tag.  n. Continue your assessment and treatment of the patient, including airway management. 4. Drug Administration  a) Determine if you have a Mark 1 Kit or DuoDote.  b) If you have a Mark 1 Kit:  1) Confirm the kit is not expired.  2) Remove the gray safety cap from auto-injector 1 (Atropine – smaller one).  3) Firmly push the black end of the auto-injector against the lateral side of the patient’s thigh, midway between waist and knee. The auto-injector may inject through clothing. DO NOT hit buttons or other objects. Make sure pockets are empty.  4) Continue to push firmly until you feel the auto-injector trigger.  5) Hold the auto-injector firmly in place until the medication is injected – 10 seconds.  6) Massage the injection site for several seconds.  7) After the drug has been administered, push the needle against a hard surface to bend  the needle back against the auto-injector. 8) Safely store and dispose of the used auto-injector (e.g., biohazard “sharps” container).  9) Repeat the process for auto-injector 2 (Pralidoxime – larger one).  c) If you have DuoDote:  1) Confirm the auto-injector is not expired.  2) Firmly grasp the center of the auto-injector with the green tip pointing down.  3) Pull off the gray safety release.  4) Firmly push the green tip of the auto-injector against the lateral side of the patient’s thigh,  midway between waist and knee at a 90 degree angle. The auto-injector may inject  through clothing. DO NOT hit buttons or other objects. Make sure pockets are empty.  5) Continue to push firmly until you feel the auto-injector trigger.  6) Hold the auto-injector firmly in place until the medication is injected – 10 seconds.  7) Remove the auto-injector from the injection site and look at the green tip. If the needle is  visible, the drug has been administered. If the needle is not visible, check to be sure the  gray safety release has been removed and then repeat steps 4-6 but push harder in step 4.  8) Massage the injection site for several seconds.  9) After the drug has been administered, push the needle against a hard surface to bend the  needle back against the auto-injector.  10) Safely store and dispose of the used auto-injector (e.g., biohazards “sharps” container).  |  **P**  |

Pearls: The Idaho EMS Bureau has taken extreme caution to ensure all information is accurate and in accordance with professional standards in effect at the time of publication. This protocol must be followed by EMR, EMT and AEMT personnel. This protocol may not be modified by the Medical Director except at the Paramedic level. It is recommended that care be based on the patient’s clinical presentation and on authorized policies and guidelines. |