Hydroxocobalamin for Cyanide Toxicity – Adult / Adolescent

BACKGROUND:

Hydroxocobalamin binds with cyanide and limits cyanide interfering with body tissue emergency production.

INDICATIONS:

- Cyanide toxicity, known or suspected.
- Smoke inhalation, smoke generated from burning plastics or petroleum products.

CONTRAINDICATIONS:

- Known allergy to hydroxocobalamin.

PROCEDURE:

1. Make Base Hospital contact for a hydroxocobalamin order and possible burn center destination.
2. Mixing instructions for hydroxocobalamin supplied in a Cyanokit®:
   A. Identify the 250 mL glass vial containing 5 gm of lyophilized hydroxocobalamin.
   B. Place vial in an upright position. Add 200 mL of 0.9% normal saline to the vial using the transfer spike.
   C. Repeatedly invert and rock vial (do not shake) for approximately 60 seconds.
   D. When solution is dark red in color and no particles are visible, it is appropriate for infusion.
3. Patient management:
   A. Remove the individual from the environment.
   B. Assess ABCs and mental status and provide airway support as needed.
   C. Apply high-flow oxygen by mask or nasal cannula as tolerated.
   D. Establish IV / IO access.
   E. Infuse hydroxocobalamin IV / IO over approximately 15 minutes.
   F. Do not simultaneously administer other medications with hydroxocobalamin through the same IV / IO site.

CAUTIONS:

- Use of hydroxocobalamin can cause the skin and mucous membranes to turn a reddish color. Allergic reactions have also been reported. Therefore, inform receiving facility that hydroxocobalamin was administered in the field prior to arrival.

- Increases in blood pressure may be observed and expected following hydroxocobalamin infusion.