Drug Name: Hydroxocobalamin 5 g
Trade Name: Cyanokit®

Class:
• Antidote (for known or suspected cyanide poisoning)

Mechanism of Action:
• Action of Cyanokit is the ability to bind cyanide ions
• Each hydroxocobalamin ion can bind one cyanide ion by substituting it for the hydroxo ligand linked to the trivalent cobalt ion
• Bind forms cyanocobalamin
• Cyanocobalamin is excreted in the urine

Indications:
• Known or suspected cyanide poisoning
  • Can be inhalation, ingestion or dermal exposure
  • Can be used even if the presence or extent are not known
• Signs of cyanide ingestion include:
  • *Altered LOC, seizures, coma, cardiovascular collapse, vomiting, *mydriasis, tachypnea(early), bradypnea(late), hypertention(early), hypotention(late)
• Symptoms include:
  • Headache, *confusion, dyspnea, chest tightness, nausea

(*considered significant symptoms)

Contraindications:
• None

Precautions:
• Known anaphylactic reactions to hydroxocobalamin or cyanocobalamin
  ▪ Allergic reaction include: anaphylaxis, chest tightness, edema, urticarial, pruritus, dyspnea, rash
• Substantial increases in blood pressure may occur following Cyanokit administration
• Patients with renal insufficiency

Dosage and Administration:
Adults:
• Add 200 mL of 0.9% Sodium Chloride into the vial
• Vial contains 5 g of medication
• Shake for at least 60 seconds to reconstitute
• Infuse into patient over 15 minutes
• One vial is a complete starting dose
  • Depending on the severity of the poisoning and patient response, a second dose over 15 minutes may be infused for a total dose of 10 g.
Pediatrics:
- No recommended dose

Onset:
- Depends on severity of exposure

Side Effects:
  **Minor:**
  - Chromaturia (red colored urine)
  - Erythema (red skin)
  - Headache
  - Nausea

  **Major:**
  - Hypertension

Interactions:
- Interacts with a number of medications and blood products
- Must use a separate intravenous line or flush existing line adequately

PEARLS:
- Pediatric doses have not been established in US
- Non-US: doses at 70 mg/kg have been used to treat pediatrics
- No adjustment of dose is required for Geriatric patients