County of San Luis Obispo Public Health Department

Glucagon Hydrochloride (Glucogan®)

Division: Emergency Medical Services Agency

Effective Date: 04/15/2017

## **GLUCAGON HYDROCHLORIDE (Glucogan®)**

**Classification**: Hyperglycemic agent /Pancreatic hormone

Actions:

- 1. Stimulates breakdown of glycogen in the liver to increase blood sugar.
- 2. Increases inotropy and chronotropy.

Indications:

- 1. Known or suspected hypoglycemia when unable to administer Dextrose IVP x two (2) attempts or Oral Glucose.
- 2. Cardiac arrest with suspected Beta Blocker or Calcium Channel Blocker overdose (base physician order only).
- 3. Beta Blocker overdose (base physician order only).
- 4. Consider for esophageal foreign body obstruction (base physician order only).

Contraindications:

For the patient with signs or symptoms of a CVA, do not administer unless blood glucose is <60 mg/dl. If the equipment to test blood glucose is not available, base physician approval must be obtained prior to administration.

Adverse Effects: Gastrointestinal

Nausea/vomiting

Administration: ADULT DOSE

1. **Hypoglycemia:** 1 mg IM

2. **Beta Blocker OD:** 3-10 mg slow IVP (when cache available)

## **PEDIATRIC DOSE**

1. **Hypoglycemia:** 0.1 mg/kg IM, not to exceed 1 mg

2. Beta Blocker OD: 0.1 mg/kg slow IV/IM

Onset: Within 15 minutes

**Duration**: 15-30 minutes

## Notes:

- Caution is advised in administration to a patient with cardiovascular disease due to inotropic and chronotropic effects.
- Glucagon is packaged as a powder that must be reconstituted prior to administration.
- Glucagon takes effect via conversion of stored glycogen in the liver. If the patient is low in stored glycogen due to alcoholism or malnutrition, Glucagon will be less effective.
- Requires EKG monitoring when used in higher doses for esophageal foreign body obstruction.