

Subject: Scope of Practice/Procedure - ALS
Dextrose 50% (D₅₀) Protocol, Dextrose 10% (D₁₀) Protocol

Associated Policies:

- I. Class
 - A. Carbohydrate.
- II. Indications
 - A. Suspected hypoglycemia with history of diabetes.
 - B. Altered level of consciousness in the adult with blood sugar less than 70 mg/dL.
 - C. Altered level of consciousness in the pediatric patient with blood glucose reading less than 60 mg/dL.
 - D. Altered level of consciousness in the neonate with blood glucose less than 50 mg/dL.
 - E. Status epilepticus with blood sugar less than 60 mg/dL.
- III. Therapeutic Effects
 - A. Restores blood sugar toward normal.
- IV. Contraindications
 - A. Absolute:
 - 1. Undiluted D₅₀ can cause cardiac dysrhythmias or arrest in the Neonate.
 - B. Relative:
 - 1. Rebound hypoglycemia.
- V. Adverse Effects
 - A. Severe tissue necrosis if administered via infiltrated IV site.
- VI. Administration and Dosage
 - A. D₅₀ Administration:
 - 1. Adult dose: 10 to 25 grams of dextrose (20 to 50 mL of 50% dextrose). Repeated doses and supportive treatment may be required in severe cases
 - B. D₁₀ Administration:
 - 1. Adult dose:
150ml drip ran wide open to effect. If blood sugar remains below 60mg/dL, repeat D₁₀ 100ml. Consider IO access only if no IV access and Glucagon is ineffective.
 - 2. Pediatric: (< 75kg):
2 ml/kg (200mg/kg). Bolus slowly over one minute. Can be repeated if blood sugar remains less than 60.
 - 3. Neonates: (less than 28 days old)

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2ml/kg (200mg/kg). Administer at rate of 1ml per minute.
Contact base hospital for additional dosing.

Special Information

- A. Determine blood glucose level prior to administration of medication.
- B. Recheck blood glucose level after medication administration and repeat after 20 minutes.
- C. Patients taking **only** oral diabetic medications should be strongly encouraged to allow ambulance transport. Recurrent hypoglycemia can be delayed for hours.
- D. Patient who meet criteria to refuse care should be encouraged to consume a meal with complex carbohydrates and protein immediately.

Approved: 

Approved as to Form: 