i. Repeat glucose is greater than 80 mg/dL
ii. Patient takes insulin or metformin to control diabetes and does not take long-acting oral sulphunylurea agents (e.g., glipizide, glyburide, or others)
iii. Patient returns to normal mental status, with no focal neurologic signs/symptoms after receiving glucose/dextrose
iv. Patient can promptly obtain and will eat a carbohydrate meal
v. Patient or legal guardian refuses transport and EMS clinicians agree transport not indicated
vi. A reliable adult will be staying with patient
vii. No major co-morbid symptoms exist, like chest pain, shortness of breath, seizures, intoxication
viii. A clear cause of the hypoglycemia is identified (e.g., missed meal)

Patient Safety Considerations

1. Dextrose 10% can be safely used in all ages of patient. Dextrose 10% works as effectively and quickly as other concentrations
2. Dextrose 50% can cause local tissue damage if it extravasates from vein and may cause hyperglycemia. Dextrose 50% carries risk for little clinical gain. EMS systems may consider carrying no more than 25% concentration of dextrose for treating hypoglycemia in adults
3. For children less than 8 years old, dextrose concentration of no more than 25% should be used
4. For neonates and infants less than 1 month of age, dextrose concentration of no more than 10–12.5% should be used
5. Sulfonylureas (e.g., glyburide, glipizide) have long half-lives ranging from 12–60 hrs. Patients with corrected hypoglycemia who are taking these agents are at particular risk for recurrent symptoms and frequently require hospital admission

Notes/Educational Pearls

A formula for calculating a 0.5 g/kg dose of IV dextrose:
(____% concentration of glucose) x (_____mL/kg) = 50

For example:

Desired	Fluid type	mL of fluid Dose
0.5 g/kg	25% dextrose	2mL/kg
	10% dextrose	5mL/kg
1 g/kg	25% dextrose	4mL/kg
	10% dextrose	10mL/kg

Key Considerations

1. Using 10% dextrose is as effective and safer than other stronger concentrations
2. Consider contribution of oral diabetic medications to hypoglycemia
3. If possible, have family/patient turn off insulin pump
4. Consider potential for intentional overdose of hypoglycemic agents
5. Avoid overshoot hyperglycemia when correcting hypoglycemia. Administer dextrose-containing IV fluids in small doses until either mental status improves or a maximum field dose is achieved