



# Altered Mental Status

## Assessment

### Pediatric Pearls:

- Use pediatric dosing of medications or electrical therapy for a pediatric patient < 37 kg and as defined by the PEDIA Tape.
- Use volume control device (IV Burette) for Dextrose Infusions.
- Upper limit BGL is 200

### Signs & Symptoms:

- Decrease mental status
- Change in baseline mental status.
- Bizarre behavior
- Hypoglycemia (cool, diaphoretic skin)
- Hyperglycemia (warm & dry skin, fruity breath, Kussmaul respirations, signs of dehydration)

### Differential:

- Hypoxia
- Brain trauma
- CNS (Stroke, Tumor, Seizure, Infection)
- Cardiac (MI, CHF)
- Infection
- Thyroid (hyper or hypo)
- Shock (septic, metabolic, traumatic)
- Toxicological / Carbon Monoxide / Cyanide
- Acidosis / Alkalosis
- Heart Stroke or Hypothermia
- Electrolyte abnormality

## Clinical Management Options

P	P	P	P	P	P	<ul style="list-style-type: none"> <li>• <a href="#">Oxygen</a>, target SpO<sub>2</sub> 92 – 96%</li> <li>• <a href="#">BGL Assessment</a>, if BGL &lt; 50 and intact gag reflex then <a href="#">Oral Glucose</a> &amp; <ul style="list-style-type: none"> <li>◦ Consider turning off insulin pump if present using <a href="#">Insulin Pump Clinical Procedure</a></li> </ul> </li> <li>• Basic Airway Management as needed</li> </ul>
L	L	L	L	L	L	<ul style="list-style-type: none"> <li>• <a href="#">Positive Stroke Screen</a> &amp; Glucose &gt; 50 and Last known well ≤ 24 hours then declare <a href="#">Stroke Alert</a> and &lt; 15 minute on-scene time</li> <li>• <a href="#">Monitor ETCO<sub>2</sub></a></li> </ul>
1	2	3	4	5	6	<ul style="list-style-type: none"> <li>• <a href="#">Vascular access</a> as appropriate for patient condition</li> <li>• If BGL &lt; 50 then <a href="#">Dextrose Infusion</a> titrated to patient condition and response</li> <li>• If BGL &lt; 50 and no IV access, then <a href="#">Glucagon</a></li> <li>• If BGL &gt; 300 in adults or &gt; 200 in pediatrics or signs of dehydration, then infusion of <a href="#">isotonic crystalloid</a></li> </ul>
						<ul style="list-style-type: none"> <li>• Cardiac monitor and <a href="#">12 ECG</a></li> </ul>
						<ul style="list-style-type: none"> <li>• Advance Airway Management as needed</li> </ul>

## Consult Online Medical Control As Needed

### Pearls:

- Refer to drug formulary charts for all medication dosing for both adults and pediatric patients.
- Be aware of AMS as presenting sign of an environmental toxin or Haz-Mat exposure and protect personal safety.
- It is safer to assume hypoglycemia than hyperglycemia if doubt exists. Recheck blood glucose after Dextrose or Glucagon.
- Do not let alcohol confuse your clinical practice as alcoholics frequently develop hypoglycemia.
- Hyperglycemia is treated with fluids since these patients are volume depleted.
- Patients on oral hypoglycemics or long acting insulin are at risk for repeat episodes of hypoglycemia, monitor closely and encourage transport.
- If hypoglycemic patients have returned to baseline and wish to refuse care make certain that the patient eats and that there is someone to observe them for repeat hypoglycemic episodes.
- Blood samples for performing glucose analysis should be obtained through a finger-stick (heel for infants). Venous blood samples may produce artificially high blood glucose values and should be avoided.