Altered Mental Status

History
- Known diabetic, medic alert tag
- Drugs, drug paraphernalia
- Report of illicit drug use or toxic ingestion
- Past medical history
- Medications
- History of trauma
- Change in condition
- Changes in feeding or sleep habits

Signs and Symptoms
- Decreased mental status or lethargy
- Change in baseline mental status
- Bizarre behavior
- Hypoglycemia (cool, diaphoretic skin)
- Hyperglycemia (warm, dry skin; fruity breath; Kussmaul respirations; signs of dehydration)
- Irritability

Differential
- Head trauma
- CNS (stroke, tumor, seizure, infection)
- Cardiac (MI, CHF)
- Hypothermia
- Infection (CNS and other)
- Thyroid (hyper / hypo)
- Shock (septic, metabolic, traumatic)
- Diabetes (hyper / hypoglycemia)
- Toxicological or Ingestion
- Acidosis / Alkalosis
- Environmental exposure
- Pulmonary (Hypoxia)
- Electrolyte abnormality
- Psychiatric disorder

	Age Appropriate Airway Protocol(s) AR 1, 2, 3, 5, 6 ***if indicated***
	Blood Glucose Analysis Procedure
B	12 Lead ECG Procedure
	IV or IO Access Protocol UP 6
	Age Appropriate Diabetic Protocol(s) AM 2/ PM 2 ***if indicated***

Patients with AMS and Pediatric Patients ≤ 4 years of age:

- Need a dedicated, complete secondary assessment
- Head-to-toe exam to exclude occult injury(s) or NAT

Signs of shock/ Poor perfusion Traumatic Injury — YES → Exit to Age Appropriate Hypotension/ Shock Protocol AM 5/ PM 3, Multiple Trauma Protocol TB 6, Head Injury Protocol TB 5

NO

Signs of OD/ Toxicology — YES → Exit to Overdose/ Toxic Exposure Protocol TE 7

NO

Signs of CVA Or Seizure — YES → Exit to Suspected Stroke Protocol UP 14, Seizure Protocol UP 13

NO

Signs of Hypo/ Hyperthermia — YES → Exit to Hypothermia Protocol TE 5, Hyperthermia Protocol TE 4

NO

Arrhythmia/ STEMI/ CP — YES → Exit to Age Appopriate Appropriate Cardiac Protocol(s)

NO

Fever/ Sepsis — YES → Exit to Fever Protocol UP 10, Suspected Sepsis Protocol UP 15

NO → **Notify Destination or Contact Medical Control**

Universal Protocol Section

Altered Mental Status

Universal Protocol Section

General:

- The patient with AMS poses one of the most significant challenges to you as a provider.
- A careful assessment of the patient, the scene, and the circumstances should be undertaken.
- Assume the patient has a life threatening cause of their AMS until proven otherwise.
- Consider the possibility of acute stroke in a patient with acute AMS change.

The algorithm is written in a step wise fashion but circumstances may dictate moving within the protocol:

- The stepwise fashion should serve as a reminder of the importance of a methodical approach to the patient with AMS.
- As you work as a team one provider may be assessing the finger stick glucose while another provider interprets the ECG rhythm.

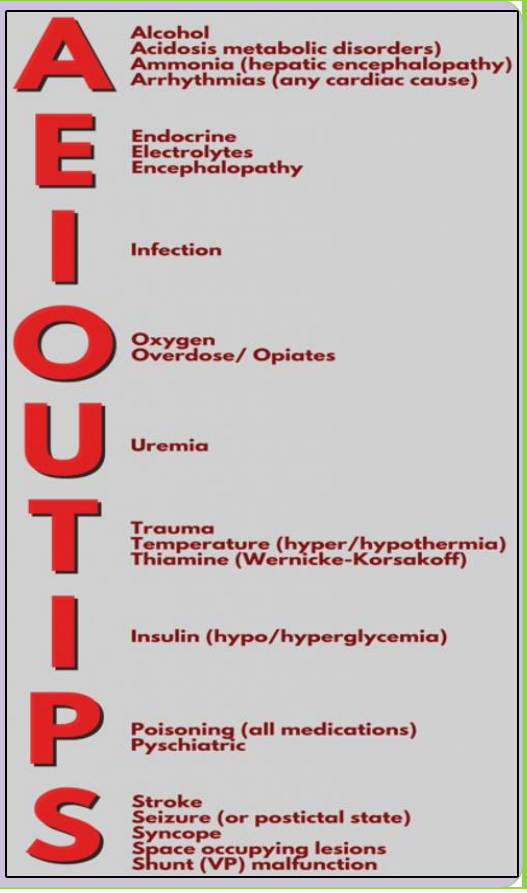
12-Lead ECG Acquisition:

- AMS, especially in the elderly, can be a sign of a cardiac etiology.
- Patients with AMS need a 12-Lead ECG assessment.
- Patients who have underlying dementia or cognitive disturbance at baseline, but a caregiver believes them to have worsening AMS, obtain an ECG.

Spinal Motion Restriction/ Trauma:

- Only utilize spinal restriction if the situation warrants.
- The patient with AMS may worsen in some instances when immobilized, so only use when necessary.

In AMS with obvious trauma, you should move immediately to the Adult Head Trauma Protocol TB 5 in conjunction with the Altered Mental Status Protocol.



Pearls

- **Recommended Exam: Mental Status, HEENT, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro.**
- **AMS may present as a sign of an environmental toxin or Haz-Mat exposure, protect personal safety.**
- **General:**
  - **The patient with AMS poses one of the most significant challenges.**
  - **A careful assessment of the patient, the scene, and the circumstances should be undertaken.**
  - **Assume the patient has a life threatening cause of their AMS until proven otherwise.**
  - **Pay careful attention to the head exam for signs of bruising or other injury.**
  - **Information found at the scene must be communicated to the receiving facility.**
  - **Patients not able to communicate with you coherently require a complete secondary survey (head-to-toe) exam to assess for trauma, infection, or signs of maltreatment/ abuse, or neglect.**
  - **Acute Stroke should be considered in all patients with acute AMS when < 24 hours from onset.**
- **Substance misuse:**
  - Patients ingesting substances can pose a great challenge.
  - DO NOT assume recreational drug use and/ or alcohol are the sole reasons for AMS.
  - Misuse of alcohol/ recreational drugs may lead to hypoglycemia or occult trauma.
  - More serious underlying medical and trauma conditions may be the cause.
- **Behavioral health:**
  - The behavioral health patient may present a great challenge in forming a differential.
  - DO NOT assume AMS is the result solely of an underlying psychiatric etiology.
  - Often an underlying medical or trauma condition precipitates a deterioration of a patients underlying disease.
- **Spinal Motion Restriction/ Trauma:**
  - Only utilize spinal immobilization if the situation warrants.
  - The patient with AMS may worsen with increased agitation when immobilized.
- **It is safer to assume hypoglycemia than hyperglycemia if doubt exists. Recheck blood glucose after Dextrose or Glucagon**
- Consider Restraints if necessary for patient's and/ or personnel's protection per USP 5 Restraints: Physical procedure.