



OhioHealth Emergency Medical Services Podcast Series  
October 2020 Episode: Altered Mental Status

Objectives:

1. Review common altered mental status terminology
2. Discuss common causes of altered mental status
3. Outline a systematic approach to initial assessment and stabilization of altered patients
4. Review management of hypoglycemia
5. Review approach to opioid overdoses
6. Discuss status epilepticus and subclinical seizures

Podcasters

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Session 1

- Case Presentation: 47-year-old male found down at home
- Descriptors of Altered Mental Status
  - Traditional Descriptors
    - Coma
    - Lethargic
    - Obtunded
    - Dementia vs. delirium
    - Organic vs. inorganic
  - Simple and straight forward description of mental status is important for clinical documentation and also for communicating to your peers and hospital personnel
  - AVPU provides a simple and easy method of classifying altered mental status
    - Alert
    - Verbal
    - Pain
    - Unresponsive
  - The GCS score may also be used; however, original application of the GCS score was for trauma patients
- Etiologies of Altered Mental Status
  - The list of potential causes of altered mental status is expansive
  - Causes may be classified with various strategies
    - Acute vs. insidious onset
    - Reversible vs. non-reversible
    - Some may be recognized in the prehospital settings, others may not
- Initial Assessment and Stabilization
  - Always assure airway, breathing and circulation

- Rely on alternative history sources
  - Bystanders
  - Medication lists
  - Past medical history
  - Scene dynamics
- Perform a detailed physical examination to compensate for limited history
- Consider point-of-care glucose testing and 12-lead ECG
- Capnography may provide clues to cause

## Session 2

- The 47-year-old male was found to have hypoglycemia
  - Hypoglycemia may be the primary problem or a secondary problem
  - Causes of hypoglycemia
    - Fasting
    - Medications
    - Critical Illness
  - Treatment options
    - Oral Dextrose
    - IV/IO Dextrose
      - There are advantages and disadvantages of D50 vs. D10
    - Glucagon
      - Glucagon has limited efficacy in malnourished patients
  - Assure appropriate mental capacity in patients that refuse transport after reversal of hypoglycemia and altered mental status
- The 47-year-old male was found to have pinpoint pupils, a slow respiratory rate and hypoxia
  - Consider opioid overdose when classic triad is present
  - Opioid overdose may present atypically in the setting of polysubstance abuse
  - Support airway protection, ventilation and oxygenation before administering naloxone if resources are limited
  - Naloxone administration
    - A slow titrated approach is more favorable than rapid administration
- The 47-year-old male was found to have abnormal movements and eye movements
  - Generalized seizures, status epilepticus and subclinical seizures may cause altered mental status
  - Benzodiazepines are effective at seizure termination
  - Report abnormal motor movements to hospital staff. Subclinical seizures are difficult to recognize
  - Status epilepticus occurs with prolonged seizures or with multiple seizures without return to baseline between seizures
    - Status epilepticus requires aggressive administration of benzodiazepines