

## Summary of Acutely Depressed Mental Status in Children

### Etiology

- Broad differential, manageable in categories
- Differentiate symmetric from asymmetric presenting signs
  - Symmetric: Toxins, Drugs, Metabolic, Infections, Primary Neuro/Epilepsy. Structural etiology less common in this group, but includes bilateral lesions and large insults
  - Asymmetric: Structural etiology more common in this group, aim to localize the lesion

### Initial Work Up

- Vitals, cardio-respiratory, focused general and neuro exams
- Glasgow coma score
- Consider initial screening labs: CBC, chemistries, LFTs, bedside glucose, UA, urine tox screen, blood culture, blood gas
- Head CT scan is the initial imaging test of choice, obtain stat if head trauma, focal neurologic signs or evidence of increased ICP (can consider stat MRI if available)
- Lumbar puncture: obtain if no signs of increased ICP and if signs of infection or if diagnosis unclear

### If Etiology Remains Elusive

- Other laboratory tests: workup for metabolic conditions, coagulation studies, specific toxins
- EEG to rule out non-convulsive status epilepticus
- Brain MRI with DWI

### Initial Management

ABCs/PALS:

- Intubate for GCS  $\leq 8$

Empiric therapy:

- 2.5 mL/kg of 10 % IV dextrose solution, do not delay pending return of blood glucose results
- If clinical seizures
  - Treat with lorazepam 0.1 mg/kg IV, max 5 mg
- If concerned for possible ingestion:
  - Opiates suspected: Naloxone 0.01 mg/kg IV, repeat Q2 min up to max of 0.1mg/kg or 2mg
  - Other antidote based on history / clinical suspicion (e.g. physostigmine for anticholinergic overdose)
- If concerned for possible infection:
  - Can treat with Ceftriaxone at meningitic doses and Vancomycin
  - Acyclovir
- If concerned for possible non-convulsive status epilepticus:
  - Can treat with lorazepam 0.1 mg/kg IV, max 5 mg
  - Fosphenytoin (15 to 20 Phenytoin Equivalents/kg) IV loading dose
- If concerned for possible increased ICP:
  - Mannitol 0.5 to 1 gram/kg IV