

Patient with Coma
(RASS -4 and -5) or (SBS -2 and -3)

Is the patient's depressed level of consciousness (LOC) caused by the disease state?

YES

Evaluate possible causes of Delirium **"BRAIN MAPS"**

- B** - Bring oxygen: treat hypoxemia, decreased cardiac output, anemia, etc.
- R** - Remove or Reduce delirio-genic drugs: anticholinergics, benzodiazepines, etc.
- A** - Atmosphere: unfamiliar area and people, bright lights, loud noises, absent family, no schedule.
- I** - Infection, Immobilization (restraints), Inflammation
- N** - New organ dysfunction: central nervous system, cardiovascular, pulmonary, hepatic, renal, and endocrine.

- M** - Metabolic disturbances: low/high sodium, potassium, glucose, and calcium, alkalosis or acidosis.
- A** - Awake: absence of bedtime routine or presence of sleep-wake cycle disturbance.
- P** - Pain: uncontrolled pain with not enough drug, or well controlled pain with too much drug.
- S** - Sedation: assess needs and set sedation target.

Preventive Measures

Maintain continuity of care; have loved ones present around the child.
Create calm, reassuring environment with familiar pictures, toys, blankets, and tranquil music, etc.
Establish a day-night routine with periods of appropriate activity and uninterrupted rest.
Consider the necessity of endotracheal tubes, foley catheter, intravenous lines, and restraints, etc.
Consult child life specialists and hospital teachers when appropriate to promote daily routines.

NO

Pharmacologic therapy causing depressed LOC

Establish the desired target level of sedation.

- Consider a RASS or SBS of 0 (alert and calm) as the target.
- If disease therapy requires the patient be sedate, set the target as high as possible while allowing for needed interventions.
- Re-evaluate the risk/benefits of sedation for patients daily.
- Maintain adequate analgesia.

Provide titration plan to reach/maintain target level of sedation.

- Chose sedatives with less delirio-genic activity when sedation is required.
- Titrate or discontinue use of delirio-genic medications such as benzodiazepines if not necessary.

Use the Pediatric Road Map to guide discussion during clinical rounds

Re-evaluate possible causes of delirium (**"BRAIN MAPS"**) and coma.

Consider preventative measures for delirium.