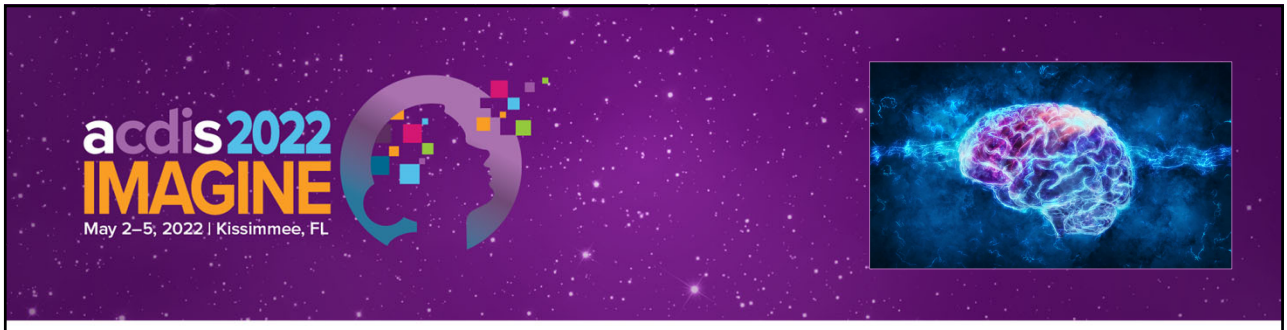

Why All the Confusion? The Fallacy of ICU Delirium

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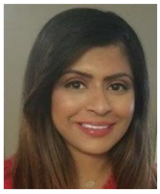
Presented By



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Presented By

Merle Zuel, RN, CCDS, RN advisor of CDI at Kansas City VA Medical Center in Kansas City, Missouri, has been involved in national CDI improvement efforts. Nationwide networking through the VA and other organizations has shaped his knowledge of the challenges faced by private-sector employees entering the VA system in CDI. A member of the ACDIS Leadership Council, Zuel has contributed to the ACDIS *CDI Journal* through his “The VA Way” series of articles.

So why all the confusion?

What are some of the challenges you as CDI professionals face when you see " AMS " in the chart …

Open forum

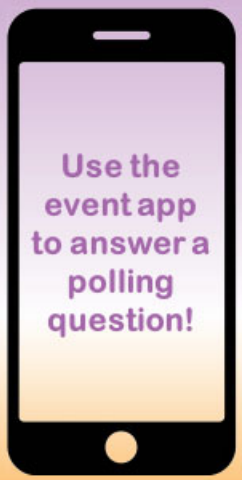
Learning Objectives

- At the completion of this educational activity, the learner will be able to:

#1	#2	#3
Discuss the different types of encephalopathy with case examples and discussion	Differentiate delirium from encephalopathy and discuss case examples	Identify effective and creative ways for provider education and collaboration

5

Steps for Attendees to Answer/View POLLING QUESTIONS



1. Navigate to the **Schedule** in the main menu.
2. Tap the **name of the current session** to view the session details page.
3. Scroll down the page to **Live Polls.**
4. Tap the **name of the poll.**
5. Tap your **answer** choice(s) and then tap **Submit.**

Let's start with a little challenge

Case #1

69 yo male presents to the ED via EMS and now admitted to ICU due to combativeness, patient swinging his fists at nursing providers. Hemodynamically stable but severely confused, incoherent. All labs unremarkable except liver enzymes mildly elevated. Neuro consult indicates schizophrenia with hx of seizures and hx of neuroleptic induced dyskinesia. Holding PTA quetiapine 400mg daily, venlafaxine 150mg daily, pregabalin 300mg BID and modafinil 200mg daily due to NPO status. Intermittently directable, continued lethargy, rhythmic movements of hands and mouth. Haldol 5mg given in ED for severe agitation. Psych consult pending.

Provider Assessment and Plan:

Metabolic vs Toxic encephalopathy, Schizophrenia.

-Encephalopathy 2/2 subclinical seizure vs ICU delirium vs Medication induced vs Sepsis

Poll Question 1

- **Which conditions would you be able to code from the scenario?**
  - Metabolic encephalopathy
  - Toxic encephalopathy
  - Schizophrenia
  - Seizure disorder
  - Adverse effect of neuroleptics

POLLING RESULTS

Question 1

Case #1 Discussion

Case #2

88-year-old woman admitted for fever, and confusion, unable to obtain history from patient. Granddaughter at bedside. States patient has been having fever for the last 2-3 days and a cough, they haven't measured the temp at home. She doesn't really seem to think patient is more confused, but states that the patient isn't conversing much since she got sick, she has been choking on her food a lot. Labs significant for WBC 18K, otherwise rest of CBC normal. Cr of 3.0, lactic acid normal, rest of CHEM normal. CXR significant for right middle lobe opacity, CT head with chronic microvascular changes.UA neg, urine and blood cultures pending

Physical Exam
Vitals : 87/56, HR 120, RR 20 T 39
General : Appears stated age, NAD
HEENT : PERRLA, EOMI , dry mucus membranes
CVS : RRR, no murmurs
Resp : Right Lung Rhonchi
Abdomen : Soft , NT, ND
Neuro : Alert , oriented x 1,confused.

Case #2 Continued

Assessment and Plan:
Sepsis
Acute kidney injury
Pneumonia
Acute delirium
Start ceftriaxone and azithromycin

- Repeat labs
- Cultures pending

HTN – continue home meds
DM – lantus 10 U and sliding scale

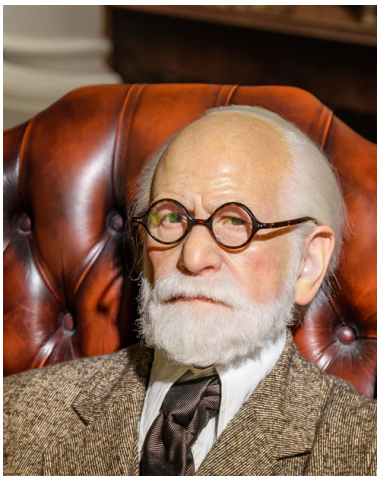
Poll Question 2

- **Would you query for the patients baseline mental status?**
  - Yes
  - No

POLLING RESULTS
Question 2

Case #2 Discussion

"Altered Mental Status"



Hmm, that's very interesting.
Please tell me more…

How is the mental status altered?
Coma? Manic Episode? Depression?
Hallucinations?
What is the suspected underlying physiological cause?

Acute Encephalopathy

- Basic definition – diffuse disease of the brain that alters brain function or structure – widespread.
- Evidence may show up on EEG but not required to make the diagnosis
- Lasts up to 2-3 days, can last weeks (uncommon)
- Clinical indictors often point to a specific type, typically metabolic.
- Overlapping criteria with the psychiatric diagnosis of delirium.
- Correction of the underlying cause will reverse encephalopathy
- Not due to structural abnormalities of the brain.
- May be superimposed on baseline cognitive disorders or chronic encephalopathies.

Acute Encephalopathy Types

- **Metabolic-MCC** - most frequent type seen. Related to metabolic abnormalities, infections, impaired oxygenation, impaired clearance of waste. Septic Encephalopathy is Metabolic Encephalopathy
- **Toxic-MCC** - caused by a specific drug or toxin and typically improves as the insult is removed or metabolized. Providers must indicate the specific drug or toxin now to code. (Effective Oct 1, 2021)
- **Hepatic-MCC** - synonymous with hepatic failure but not coma. Documentation should indicate with/without coma and other associated clinical indicators of acutely impaired liver function. (transaminitis, increased ammonia level, coagulopathy)
- **Unspecified CC** - documentation should always seek to specify the type of encephalopathy to avoid degrading the severity of illness of the case.

"Other" Encephalopathy

- **Other Encephalopathy** - used when encephalopathy is reported due to a condition (e.g., due to urinary tract infection or secondary to a lacunar infarct) without specification of a type of acute encephalopathy.
- **Anoxic/Hypoxic** - chronic permanent brain damage related to a prolonged period of hypoxia. Rapid onset, unlike other chronic encephalopathy but irreversible. Do not confuse with metabolic encephalopathy due to hypoxia which is reversible when respiratory support is initiated and resolves as the systemic insult improves.
- **Wernicke/Korsakoff Syndrome** - chronic encephalopathy typically seen in alcohol dependence related to thiamine deficiency, overall poor nutritional status. All chronic encephalopathy should be documented when present with the cause and specific type indicated.

Dementia and Encephalopathy

- **DSM-V Major Neurocognitive Disorder with/without behavioral disturbance (Dementia)** – Chronic progressive decline in cognition and executive function. The baseline level of functioning is stable unless something causes a change from the baseline. Documentation should always indicate if with or without behavioral disturbance.
- **Encephalopathy Superimposed on Dementia** – Documentation should clearly delineate a deviation from baseline cognitive functioning. Supporting indicators should be present including presence of metabolic abnormalities or infections. The best evidence to support the diagnosis is a documented return to baseline cognitive functioning after the insult is treated or removed. Both are valid diagnoses and should be reported when present.

Case #3

78 y/o patient admitted with chief complaint of altered mental status and found to have a urinary tract infection.

Per EMS his sister reports he was started on Levaquin by his outpatient provider 2 days ago and with no apparent improvement.

Unclear if he has been taking the medication as prescribed.

Unable to obtain history or review of systems due to AMS.

Patient now agitated and requiring soft restraints, pulling at lines admitted to ICU for stabilization.

Poll Question 3

- **What would your anticipated query be for?**
  - No query needed
  - Metabolic encephalopathy
  - Delirium
  - Toxic encephalopathy
  - Other Unspecified encephalopathy

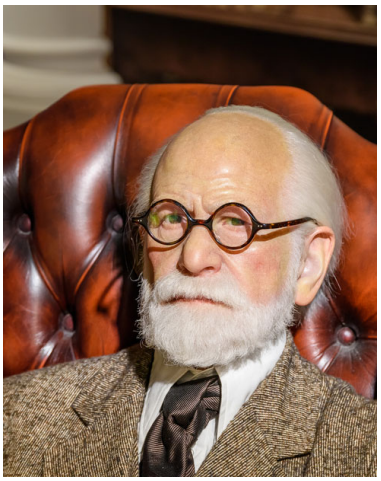
POLLING RESULTS

Question 3

Coding Clinic Guidance

- When encephalopathy is attributed to another medical condition such as stroke or UTI it is appropriate to use the code "**other encephalopathy**" if a specific type of encephalopathy is not documented.
- Seizures- Post ictal state is inherent to seizures – do not seek out metabolic encephalopathy
- Hepatic encephalopathy is not synonymous with hepatic coma.
- Code G93.41 metabolic encephalopathy for sepsis associated encephalopathy
- Documentation of delirium not otherwise specified (NOS) is assigned R41.0, Disorientation, unspecified.
- F05, Delirium due to known physiological condition, provides a CC as a secondary diagnosis. The Excludes1 note lists delirium NOS (R41.0). A note for F05 instructs to **"code first"** the underlying physiological condition.

"ICU Delirium"



Okay now that's just crazy talk

The physical location of the patient is not a modifier of this psychiatric diagnosis

"He had a GI lab myocardial infarction"
"She has cafeteria appendicitis"
See how funny that sounds when applied to other diagnoses?

ACUTE ENCEPHALOPATHY IS A NEUROLOGICAL DIAGNOSIS	DELIRIUM IS A DSM-V PSYCHIATRIC DIAGNOSIS
It is defined as any diffuse disease of the brain that alters brain function or structure. The hallmark of encephalopathy is an altered mental state. common neurological symptoms are progressive loss of memory and cognitive ability, subtle personality changes, inability to concentrate	Defined by the DSM-V as a disturbance in attention and awareness, reduced orientation to the environment. Patients will demonstrate an additional disturbance in cognition related to memory, disorientation, language, and perception.

Which do you think the ICD-10 weighs more heavily?

Delirium vs. Acute Encephalopathy

- Delirium and acute encephalopathy are essentially 2 different terms describing the same constellation of symptoms. The clinical indicators overlap.
- Delirium identifies the behavioral manifestation.
- Encephalopathy identifies the underlying pathophysiologic process responsible for the behavioral alteration.
- Treatment is generally to remove or negate the impacts of the systemic factors responsible
  - *(infection, fluid & electrolyte imbalances, hypoxia,, drugs, toxins)*
- Delirium Tremens is a valid diagnosis when the alteration in mental status is related specifically to alcohol withdrawal.
- Many providers are not aware that the diagnosis of delirium dilutes the severity of illness of their patient compared to documenting a specified type of encephalopathy

Delirium: A Psychiatric Diagnosis

- According to the *American Journal of Psychiatry*, delirium is a syndrome of acute brain failure that is the direct pathophysiologic consequence of an underlying medical condition or toxic exposure.
- Although delirium is common, the diagnosis relies on a high index of suspicion, as it often goes undetected or misdiagnosed. A thorough clinical evaluation is considered the gold standard for diagnosis of delirium, as there is no clinical study or biomarker with high sensitivity and specificity.
- **ICU Delirium = Delirium NOS = R41.0 – a symptom code, no impact**
- Overlapping diagnostic criteria with neurological diagnosis of encephalopathy.
- ICD-10 assigns less severity of illness to the psychiatric diagnosis.

Case #4

67 y/o patient admitted with chief complaint of shortness of breath, confusion with a history of alcohol use disorder in remission found to be COVID +. Patient reports history of COPD and compliance with medications. Current daily smoker, no other drug use reported. Transferred to ICU overnight due to increased oxygen demands and worsening hypoxia, agitation, and confusion.

Dx: Acute hypoxic respiratory failure 2/2 COVID-19 pneumonia, ICU delirium, COPD, tobacco use

Poll Question 4

- **What query opportunity would you pursue?**
  - No query needed
  - Query for metabolic encephalopathy
  - Query for delirium tremens
  - Query for toxic encephalopathy
  - Query for alcohol withdrawal

POLLING RESULTS

Question 4

Clinical Judgement Is the Key

- There is nothing more valuable than consistent documentation that a condition exists. This is especially true for the diagnoses of acute encephalopathy and delirium. Delirium is assigned less weight in ICD-10 than acute specified encephalopathy. Neither diagnosis can be definitively proven or disproven due to the overlapping diagnostic criteria. so the clinical opinion of the attending provider carries more weight.
- Do not let Recovery Auditors bully or derail your efforts to improve your severity of illness by targeting acute encephalopathy for denial when it is the lone MCC. Educate providers about the need for clear, congruent and consistent documentation will help prevent some of those challenges.

Case #5

72 y/o patient admitted via EMS from home with chief complaint of pain. PMH of DMII, HTN, COPD, recent hospitalization for diabetic foot ulcer debridement. Patient only oriented to person and unable to give meaningful history. Wife reported to EMS that patient is normally very active and A&Ox4 Malodorous foot wound appears to be infected with possible osteo. Vascular and Ortho consults ordered. CT of head no acute abnormalities. Vanc/Zosyn started in the ED

Dx: Sepsis 2/2 to non-healing diabetic foot wound., altered mental status versus ICU delirium

Poll Question 5

- **How would you clarify the differential diagnosis?**
  - No query needed
  - Query for metabolic encephalopathy
  - Query for delirium
  - Query for toxic encephalopathy
  - Query for septic encephalopathy

POLLING RESULTS

Question 5

Provider Engagement Tips

- Teaching physicians. Physician advisor/champion
- RN Advisor specific to CDI to engage and educate providers on ICD-10 documentation requirements.
- Query choices – clinical indicators must be clear and specific.
- 1:1 education 15 mins
- Tip cards
- Lunch and learn
- Ongoing education, outreach and collaboration with providers.