

## Delirium could be Hepatic Encephalopathy (HE)

- **HE** is a decline in brain function, causing altered mental status, that occurs as a result of liver disease (cirrhosis).
- **Signs of liver disease include:** fatigue, loss of appetite, ascites (abdominal fluid accumulation), and jaundice (yellowing of skin/ eyes).
- **HE** diagnosis is a **diagnosis of exclusion** – clinical presentation of this altered mental status, in a cirrhotic patient, absent other causes.
- Therefore, **ALL** facility staff in direct caregiving roles should be aware of signs of HE to inform the differential diagnosis.
- **HE Signs/Symptoms:** flapping tremor (asterixis), stupor, disorientation, emotional lability, slurred speech, lethargy/ somnolence, delirium.
- Delirium is a major concern in caring for our LTC residents – The CMS State Operations Manual mentions delirium 38 times!

*If delirium is so common how will I know if it's Hepatic Encephalopathy?*

| Ask these questions: <i>Does my delirious patient have signs of cirrhosis or established liver disease?</i>   |  |
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| <b>YES</b>  | <b>NO</b>  |
| <p><u>This could be <b>Hepatic Encephalopathy</b></u></p> <ul style="list-style-type: none"> <li>• Screen for other signs such as: disorientation, lethargy, ataxia, asterixis, loss of fine motor skills, altered speech, or postural changes</li> <li>• Assess other contributing factors → <ul style="list-style-type: none"> <li>→ Recognize the existence of additional contributing factors does NOT rule out HE, but may be <u>precipitating factors!</u></li> </ul> </li> <li>• Report to medical supervisor for a test to help diagnose, grade, and manage potential HE (i.e., West Haven Criteria)</li> </ul> | <p><u><b>Is my patient on medications that could cause delirium?</b></u></p> <ul style="list-style-type: none"> <li>• Antihistamines, sedatives, benzodiazepines, opioids, steroids, Parkinson's medications, etc.</li> </ul> <p><u><b>Does my patient have blood sugar imbalances?</b></u></p> <ul style="list-style-type: none"> <li>• Check the patients' blood sugar – they could be hypoglycemic.</li> <li>• Even if patient is not diabetic, acute illness and certain medications can alter blood sugar levels.</li> </ul> <p><u><b>Does my patient have electrolyte disturbances?</b></u></p> <ul style="list-style-type: none"> <li>• Fluid/electrolyte correction can reverse delirium caused by these imbalances.</li> </ul> <p><u><b>Does my patient have signs of a Stroke (FAST)?</b></u></p> <ul style="list-style-type: none"> <li>• Face drooping, Arms uneven, Speech slurred, Time to call 911</li> </ul> |

**Why is HE important to recognize?**

- Over 4.5 million adults have liver disease making this relevant to your facilities.
- 40% of those patients will have at least one episode of hepatic encephalopathy.
- **If left untreated this could lead to brain swelling with irreversible complications.**
- Timely treatment can reverse symptom progression and therapeutic agents – Lactulose (first line) and Xifaxan (second line) – are well established and generally well tolerated.