

DECISION-MAKING CASE SUMMARIES

HIGH ACUITY NURSING #2: COGNITIVE DYSFUNCTION

CASE NAME	OVERVIEW	MAJOR CASE DECISIONS
Grace Potter	Grace Potter is a 74-year-old woman who was admitted four days ago to the Medical ICU in acute respiratory failure with severe pneumococcus pneumonia. A conservative initial treatment plan was initiated. Ms. Potter was orally intubated and mechanically ventilated 12 hours post admission when her respiratory status deteriorated. She responded well to antibiotic therapy and was extubated 36 hours post admission. On day 4 post admission, Ms. Potter began to show signs of neurological changes.	<ol style="list-style-type: none"> 1. Identifying and responding to abnormal test results, vital signs, or symptoms 2. Selecting appropriate diagnostic tests 3. Interpreting test results 4. Identifying risk factors for cognitive dysfunction 5. Responding to patient and family questions 6. Setting patient management goals 7. Selecting interventions for the plan of care
<p>Estimated Case Length: Difficulty Level: High</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Assess the patient for the presence of a cognitive dysfunction. • Demonstrate knowledge of the clinical significance of abnormal laboratory values. • Identify risk factors for development of delirium cognitive dysfunction. • Demonstrate an understanding of the confusional cognitive disorders. • Select management goals for the patient with a confusional cognitive disorder. • Demonstrate understanding of evidence-based management of a confusional cognitive disorder. • Determine evidence-based actions to prevent reoccurrence of cognitive dysfunction. 		
Questions	Correct Answers	
1. It is now 1930 and you are performing your initial shift bedside assessment on Ms. Potter. You assess her Glasgow Coma Scale	<p><i>Take her vital signs.</i></p> <p><i>Check her oxygenation status.</i></p> <p><i>Perform an abbreviated neurologic assessment.</i></p>	

<p>score as 13 (E=4, M=5, V=4). While she momentarily looks directly at you when you speak, she does not focus on you for any length of time and does not appear to be attending to what you are asking her. She seems agitated, frequently moving around in bed.</p> <p>Based on these findings, what initial actions should you take? Select all that apply.</p>	
<p>2. Ms. Potter's 1800 ABG results are now available and you review them to verify her oxygenation status. The results are as follows:</p> <ul style="list-style-type: none"> • pH of 7.44 • PaCO₂ of 33 mmHg • PaO₂ of 92 mmHg • HCO₃ of 22 mEq/L, and • SaO₂ of 96% <p>Her most current vital signs include BP of 134/74, HR of 92, and RR of 22. How should you respond to these new ABG values?</p>	<p><i>Make note of the results and continue with your patient care.</i></p>
<p>3. You discuss your concerns regarding Ms. Potter's changing level of consciousness with the</p>	<p><i>Perform a Letters Attention Test.</i></p> <p><i>Obtain a RASS score.</i></p>

<p>intensivist, who agrees that further investigation is warranted. You review her EHR and prepare to perform the CAM-ICU. Which tests and scores will you include to complete the CAM-ICU? (Select all that apply)</p>	<p><i>Perform a Command test.</i></p> <p><i>Perform a Yes/No Question test.</i></p> <p><i>Review Ms. Potter's EHR to check for mental status changes.</i></p>
<p>4. You have completed the CAM-ICU on Ms. Potter and review the worksheet results, which include:</p> <ul style="list-style-type: none"> • 3 errors when attempting to correctly identify the letter A • RASS score of +1. • Lifted 3 fingers on right hand none on left when commanded to do so. • Answered 2 of 4 yes/no questions correctly. • Her baseline GCS was 15 and is now 13. <p>Based on these data, which conclusion can you draw?</p>	<p><i>She meets the CAM-ICU criteria for delirium.</i></p>
<p>5. You are reviewing Ms. Potter's EHR to check for possible risk factors that could have precipitated her delirium. Which of the following of Ms. Potter's EHR data place her at risk for an acute confusional cognitive disorder? Select all that apply.</p>	<p><i>Age of 74 years</i></p> <p><i>Her recent severe pneumococcal pneumonia.</i></p> <p><i>ICU patient status</i></p> <p><i>Recent mechanical ventilation support</i></p>

<p>6. You are aware that certain drugs have been associated with development of delirium. For this reason, you are reviewing Ms. Potter's prescribed medications.</p> <p>Which of her medications have been associated with increased risk for delirium? Select all that apply.</p>	<p><i>alprazolam (Xanax)</i></p> <p><i>ranitidine (Zantac)</i></p> <p><i>acetaminophen (Tylenol)</i></p>
<p>7. You are talking with Ms. Potter's daughter, Rebecca, about her mother's altered cognitive status and the CAM-ICU results. During your conversation she states, "I'm really confused about the difference between delirium and dementia. We hear a lot about dementia, but I've never really learned about delirium. Can you explain them to me?" Which statements accurately reflect dementia and delirium. Select all that apply.</p>	<p><i>"Delirium is an acute onset problem, meaning that the symptoms develop quickly."</i></p> <p><i>"People with dementia develop symptoms slowly over months to years."</i></p> <p><i>"People with delirium usually alternate between being hypoactive and hyperactive."</i></p>
<p>8. You are currently reporting on Ms. Potter's mental status changes during interdisciplinary rounds. The contents of your verbal report should include patient data that help achieve what essential management goal specific to Ms. Potter's changed cognitive status?</p>	<p><i>Identification of underlying cause</i></p>

<p>9. You and the ICU interdisciplinary team have developed an evidence-based delirium management plan for Ms. Potter, and new orders are being written. Which of the following delirium-focused interventions should you include in your plan of care? Select all that apply.</p>	<p><i>Reorient to room environment, staff, and activities as needed and provide orientation cues.</i></p> <p><i>Maintain quiet, calm environment, reducing stimuli and unnecessary noise.</i></p> <p><i>Promote adequate sleep and rest, maintaining normal day and night light variations.</i></p> <p><i>Encourage family visitation throughout day.</i></p> <p><i>Administer haloperidol (Haldol) as ordered for severe agitation.</i></p>
<p>10. You have implemented the latest orders written for Ms. Potter and are now reviewing the latest lab results and new orders. What tentative conclusions can you draw regarding these latest data?</p>	<p><i>A new onset catheter-related UTI may be contributing to Ms. Potter's onset of delirium.</i></p>
<p>11. Ms. Potter is resting quietly and you are doing some preliminary consideration of how her plan of care should be revised to prevent future occurrences of delirium once this current episode has been resolved. In addition to her current delirium-related interventions, what additional interventions do you recommend? Select all that apply.</p>	<p><i>Maintain intake and output balance.</i></p> <p><i>Initiate a progressive ambulation regimen.</i></p> <p><i>Assure that the patient's glasses are on during the daytime.</i></p>