Care of Patient with Dementia

Introduction

Dementia is marked by significant impairment in memory, orientation, judgment and cognition. Dementia isn't a single disease; it's a constellation of diseases, marked by progressive cognitive impairment. Causes of dementia vary, ranging from infection and nutritional deficiencies to irreversible conditions such as Alzheimer's disease. (See *Diagnostic tests for dementia.*)

DIAGNOSTIC TESTS FOR DEMENTIA

Dementia has several causes, including infection, stroke, nutritional deficiencies, Alzheimer's disease, and atherosclerosis. These diagnostic tests may be ordered to help determine the cause of dementia so that proper treatment can be initiated.

Test	Significance	
Blood tests		
• Red blood cell count with differential	Identifies infection	
• Complete blood count with differential, hemoglobin, hematocrit	Identifies anemia	
• Erythrocyte sedimentation rate	Identifies infection or vasculitis	
Urine examination and toxicology		
• Glucose and acetone level	May indicate diabetes	
Leukocyte level	Identifies infection	
• Drug levels or other levels of other toxic substances, including specific search for evidence of drug use	May identify toxicity, overdose of agents such as barbiturates and ethanol	
• Albumin and porphyria screen	Identifies renal failure	
• Heavy metals, including lead, mercury, manganese, aluminum, arsenic (can also be done as a serum test)	Identifies heavy metal intoxication	
Serum tests		
• Blood urea nitrogen and creatinine	Identifies possible renal failure	
• Glucose	May indicate diabetes or hypoglycemia	
Triiodothyronine, thyroxine	May indicate thyroid disease	
• Electrolytes	Identifies imbalances and parathyroid- induced changes in calcium and phospate	
• Magnesium and bromide	Identifies toxicity, which could result	

Asst. Prof. Arnel Banaga Salgado, Ed.D., D.Sc., RN

	-		
	from overuse of drugs containing these substances		
Copper	Identifies Wilson's disease		
• Folate, ferritin, iron, B ₁₂ levels	Identifies nutritional problems such as thiamin deficiency and iron deficiency		
• Aspartate aminotransferase, bilirubin	Identifies hepatic disease		
• Venereal Disease Research Laboratory or rapid plasma reagin	Detects syphilis		
Human immunodeficiency virus	May indicate AIDS dementia		
Lactate dehydrogenase	Increased level indicates possible myocardial infarction, hepatic disease, and central nervous system damage		
Parathyroid hormone	Altered levels associated with various cognitive disorders		
Imaging			
Chest X-ray	Identifies infection, heart failure		
Skull X-ray	Provides evidence of increased intracranial pressure, fractures		
• EEG	Identifies ictal phenomena		
Computed tomography (CT) scan	Provides evidence of brain tumor, subdural hematoma, infection, hemorrhage		
Magnetic resonance imaging	Provides more sensitive detection of vascular changes than CT scan		
Lumbar puncture	Provides evidence of infection, hemorrhage		
Ultrasound	Detects vascular causes of dementia		
Single-photon emission CT scan	Highlights brain activity; helps in differential diagnosis of dementias		
Sources: Sadock P. L. and Sadock V.A. Kaplan & Sadock's Supersis of Psychiatry 10th ad Philadelphia: Lippincott			

Sources: Sadock, B.J., and Sadock, V.A. Kaplan & Sadock's Synopsis of Psychiatry, 10th ed. Philadelphia: Lippincott Williams & Wilkins, 2007; Gauthier, S., ed. Clinical Diagnosis and Management of Alzheimer's Disease, 3rd ed. Abingdon, U.K.: Informa Healthcare, 2007.

Nurses may encounter patients with dementia in various settings, including homes, hospitals, adult day-care centers, skilled nursing facilities, and clinics. Depending on the stage of the dementia, nursing care may range from assuming total care to cultivating the patient's independence. Although the likelihood of dementia does increase as the patient ages, some individuals may develop early-onset dementia.

Patients with dementia who are admitted to an inpatient unit secondary to an acute problem are likely to decompensate in terms of their cognitions and their behaviors. This decline can be disconcerting to the nurse and to the family members, who are typically unprepared for such a dramatic transition. Confusion in patients with dementia commonly increases in the evening, a phenomenon called "sundowning."

Ongoing assessment of the patient is essential, especially if the patient is having difficulty communicating. The patient may become agitated or aggressive with little warning. The patient who has limited communication skills will be unable to articulate his needs, resulting in altered food and fluid intake and altered elimination patterns. Additionally, a patient with dementia who's becoming increasingly agitated may be experiencing pain but be unable to tell the nurse about it.

Bringing in pictures from home and having a clock on the wall and a calendar in the room are tools that may help orient the patient with dementia. If the patient becomes insistent and is obviously confused, avoid arguing or reality testing, which will likely increase the patient's frustration. Distraction may be used to soothe the patient with dementia who's agitated. Decreasing environmental stimuli and gently redirecting the patient may also be helpful.

Delirium, a disorder that's also marked by confusion and cognitive changes, may occur in addition to dementia or as a separate entity. When possible, the nurse should find out if the patient's cognitive changes have occurred recently or if they have developed gradually over time. Various tools can be used to assess a patient's cognitive capacity and help the clinician differentiate dementia from delirium. (See *Questionnaire for dementia* and *Differentiating delirium and dementia*.)

QUESTIONNAIRE FOR DEMENTIA

This series of questions helps obtain subjective and objective data for identifying dementia in a patient.

Subjective data

Behavioral changes (questions typically asked of the family)

- Is there a change in the patient's behavior? If so:
- How does the present behavior differ from former behavior?
- When was this change first recognized?

Emotional changes

- Are any of the following present: depression, anxiety, paranoia, agitation, grandiosity, confabulation?
- Does the patient have insight into the fact that "things are not right?"
- Is the patient complaining of many physical ailments for which there are no basis?
- Are certain previous personality traits becoming dominant or exaggerated?

Social changes

- Is the patient exhibiting embarrassingly loud and jocular behavior?
- Is there sexual acting-out beyond the bounds of propriety?
- Has the patient shown signs of short temper, irritability, or aggressiveness?
- Is there an increasing inability to make social judgments?

Intellectual behavior

- Has the ability to remember recent events decreased?
- Has the ability to problem-solve decreased? (This ability might be especially apparent in the work or job area.)
- Do new environments or even old environments result in the patient's disorientation?
- Is it difficult for the patient to carry out complex motor skills? Do his or her efforts result in many errors?
- Are any of these language problems present:
- Has the patient's language changed?
- Does the patient's language ramble and wander from the point of the conversation?
- Is the point of the conversation never clearly stated?
- Is there difficulty comprehending complex material?
- Does the patient have trouble remembering names of people and objects?
- Does the patient have difficulty writing?

Functional capacity

- Are there any changes in the patient's ability to perform activities of daily living (ADLs)?
- Is there difficulty transferring or ambulating?
- Is there difficulty bathing, dressing, or grooming?
- Is there difficulty eating or toileting?
- Are there any changes in the patient's ability to perform instrumental ADLs?
- Is the patient able to make a grocery list, shop for food, and handle money?
- Is the patient able to use the telephone?
- Can the patient prepare a meal and complete housekeeping tasks?

Objective data

Level of consciousness

• Is the patient confused, sleepy, withdrawn, adynamic, or apathetic?

Appearance

• Is there decreased personal hygiene?

Attention

- Does the patient have decreased ability to repeat digits after the interviewer?
- Do other stimuli in the environment easily distract the patient from the interviewer?
- Does the patient focus on only one of the stimuli in the environment, and is he or she unable to turn attention from the one stimulus?

Language

- Outflow of words decreases.
- Patterns of repetitive, tangential, or concrete speech appear.
- Writing skills decrease more rapidly than the spoken word.

Memory

• Test the patient's ability to remember four unrelated words and recent events. (Confabulation and anger often will be used by the patient to move the interviewer away from questions related to memory.)

Constructional ability

• The patient is instructed to copy a series of line drawings; the patient is commonly unable to do this, or the ability to do so declines over time.

Cortical function

- The patient's ability to perform arithmetic is faulty and reveals many errors.
- Proverb interpretation—typically, patients with dementia give only a concrete interpretation of the proverb.
- Similarities—Patients with dementia typically deny similarities between two objects and instead give a concrete answer. For example, when asked, "What is the similarity between a tiger and a cat?" the patient may reply, "One is small and one large. There is no similarity."

Reprinted with permission from Mohr, W.K. *Psychiatric-Mental Health Nursing: Evidence-Based Concepts, Skills, and Practices,* 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2008. www.lww.com

Nursing care of the patient with dementia involves monitoring the patient's vital signs and behavior while using the least restrictive measures of ensuring that the patient and others are safe. In situations where the patient's activities are restricted, nursing observation and documentation must be ongoing and thorough.

DIFFERENTIATING DELIRIUM AND DEMENTIA

Although delirium and dementia both affect a patient's cognitive abilities, the nurse must be aware of the characteristics of each condition to ensure proper diagnosis and treatment.

Characteristic		Delirium	Dementia
1.	Onset	Rapid	Gradual and insidious
2.	Duration	Brief (1 month or less), depending on the cause	Long, with progressive deterioration
3.	Course	Daytime alterations, with more exacerbations at night	Stable progression of symptoms, with increased confusion in the evenings (sundowning effect)
4.	Memory	Disorganized and impaired short- term memory	Short-term and long-term memory impairments progressing to complete loss
5.	Orientation	Markedly decreased, especially to environmental cues	Progressively decreases
6.	Language	Rambling, pressured, irrelevant	Difficulty recalling the correct word, loss of language in later stages
7.	Perceptual disturbance	Environment unclear, progressing to illusions, hallucinations, and delusions	
8.	Level of consciousness	Fluctuating cloudiness; inattentive to hyperalert with distractibility	Not affected
9.	Sleep	Day–night reversal, insomnia, vivid dreams and nightmares	Possible day-night reversal in late stages
10.	Psychomotor actions	Sluggish to hyperactive; changes unpredictable	Not affected initially; restlessness with pacing in late stages
11.	Emotional status	Anxious with changes in sleep, fearful if experiencing hallucinations, weeping, yelling	· · · ·

Equipment

- Thermometer
- Sphygmomanometer
- Stethoscope
- Medications as ordered

Implementation

- 1. Review the patient's medical and behavioral health histories.¹
- 2. Confirm the patient's identity using two patient identifiers according to your facility's policy.
- 3. Tell the patient who you are and why you're in his room. Reinforce this information as often as necessary.
- 4. Explain to the patient what you're going to do before initiating physical contact.
- 5. Monitor the patient's vital signs.
- 6. Observe the patient for any dramatic behavior changes.
- 7. Assist the patient with eating and toileting as needed.
- 8. Avoid arguing with the patient; use distraction instead.
- 9. Notify the doctor if a patient develops new-onset confusion or has periods of clarity mixed with confused episodes.
- 10. Decrease environmental stimuli if the patient becomes agitated.
- 11. Use the least restrictive options for managing the patient's behavior.
- 12. Administer medications as ordered and needed.¹
- 13. Document the procedure.⁸

Special Considerations

- The patient with wandering behavior presents particular difficulties in terms of maintaining safety. Review the unit's policies for using side rails, medications, and restraints for patients who wander. Some patients may benefit from being on a unit designed to handle wandering behavior. Such units have alarms to alert staff when a patient attempts to wander.
- Be aware that side rails present an obstacle that the confused patient may attempt to overcome, resulting in falls with serious injuries.

Patient Teaching

Use simple, clear instructions when teaching the patient about a procedure. Be alert to signs of increasing agitation, and pace your teaching accordingly. Speak with family members about the patient's behaviors and the rationales for interventions. Request family input, when possible, to help orient the patient (for example, having the family bring objects from home to the patient's room).

Documentation

Document your assessment findings, including intake and output, behavioral changes, and the patient's vital signs. Document nursing interventions as the patient's behavior changes throughout the day. Emphasize the use of the least restrictive alternative at all times. If medications or restraints are needed at any time to maintain the patient's safety or the safety

of others, make sure that you thoroughly document the patient's behavior that necessitated such interventions, alternative interventions employed before using the medication or restraint, and the patient's response. Note any teaching provided to the patient and family members as well as areas of learning that require additional teaching.

References

- American Psychiatric Association. (2007, October). "Practice Guideline for the Treatment of Patients with Alzheimer's Disease and Other Dementias, 2nd ed." [Online]. Accessed January 2010 via the Web at http://www.psychiatryonline.com/pracGuide/pracGuideChapToc_3.aspx.
- 2. Bradway, C., and Hirschman, K.B. "Working with Families of Hospitalized Older Adults with Dementia: Caregivers are Useful Resources and Should be Part of the Care Team," *AJN* 108(10):52-60, October 2008.
- 3. *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., Text Revision. Arlington, Va.: American Psychiatric Association, 2000.
- 4. Gauthier, S., ed. *Clinical Diagnosis and Management of Alzheimer's Disease*, 3rd ed. Abingdon, U.K.: Informa Healthcare, 2007.
- 5. Gitlin, L.N., et al. "Tailored Activities to Manage Neuropsychiatric Behaviors in Persons with Dementia and Reduce Caregiver Burden: A Randomized Pilot Study," *American Journal of Geriatric Psychiatry* 16(3):229-39, March 2008.
- Hogan, D.B., et al. "Diagnosis and Treatment of Dementia: 4. Approach to Management of Mild to Moderate Dementia," *Canadian Medical Association Journal* 179(8):787-93, October 2008.
- 7. The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: The Official Handbook.* Standard NPSG.01.01.01. Oakbrook Terrace, II.: The Joint Commission, 2010.
- 8. The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: The Official Handbook.* Standard RC.01.03.01. Oakbrook Terrace, II.: The Joint Commission, 2010.
- 9. Knopman, D.S., et al. "Practice Parameter: Diagnosis of Dementia (An Evidence-Based Review). Report of the Quality Standards Subcommittee of the American Academy of Neurology." *Neurology* 56(9):1143-53, May 2001.
- 10. Logsdon, R.G., et al. "Evidence-Based Interventions to Improve Quality of Life for Individuals with Dementia," *Alzheimer's Care Today* 8(4):309-318, 2007.
- 11. Mohr, W.K. *Psychiatric-Mental Health Nursing: Evidence-Based Concepts, Skills, and Practices,* 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2008.
- 12. Nettina, S.M. *Lippincott Manual of Nursing Practice*, 9th ed. Philadelphia: Lippincott Williams & Wilkins, 2010.
- 13. Rozzini, R., and Trabucchi, M. "Managing Persons with Dementia in the Nursing Home," *Journal of the American Medical Directors Association* 9(5):368, June 2008.

- 14. Sadock, B.J., and Sadock, V.A. *Kaplan & Sadock's Synopsis of Psychiatry*, 10th ed. Philadelphia: Lippincott Williams & Wilkins, 2007.
- 15. Yao, L., and Algase, D. "Emotional Intervention Strategies for Dementia-Related Behavior: A Theory Synthesis," *Journal of Neuroscience Nursing* 40(2):106-15, April 2008.

Caring for a Patient with Dementia

- 1. Review the patient's medical and behavioral health histories.
- 2. Confirm the patient's identity.
- 3. Tell the patient who you are and why you're in his room as often as necessary.
- 4. Explain to the patient what you're going to do before initiating physical contact.
- 5. Monitor the patient's vital signs.
- 6. Observe the patient for behavior changes.
- 7. Assist the patient with eating and toileting as needed.
- 8. Avoid arguing with the patient; use distraction instead.
- 9. Notify the doctor if a patient develops new-onset confusion or has periods of clarity mixed with confused episodes.
- 10. Decrease environmental stimuli if the patient becomes agitated.
- 11. Use the least restrictive option to manage the patient's behavior.
- 12. Administer medications as ordered and needed.
- 13. Document the procedure.