Behavioral Complications of Dementia

Gary W. Small, M.D. Parlow-Solomon Professor of Aging
UCLA School of Medicine
Professor of Psychiatry & Biobehavioral Sciences
Director, UCLA Center on Aging

Jason Olin, Ph.D.
National Institute of Mental Health
Pre-Lecture Exam

Question 1

1. Which of the following complications occur frequently in patients with Alzheimer’s Disease and other dementing orders (choose the best single answer)?

A. Delusions, hallucinations, agitation
B. Aggressive behavior, impulsive behavior
C. Wandering, confusion
D. Anxiety, insomnia, depression
E. All of the above
Question 2

2. Which of the following statements is NOT true?
A. Psychosis, agitation, and aggression frequently co-exist in AD.
B. Olfactory hallucinations are pathognomonic for AD.
C. About half of dementia patients exhibit aggressive behavior at some time.
D. Antipsychotic medications can help in the treatment of agitated behavior.
E. Antipsychotic medications can help in the treatment of psychotic behavior.
3. Which of the following is a true statement about depression and Alzheimer’s Disease?

A. Alzheimer’s Disease patients rarely develop comorbid depression.
B. Depression in Alzheimer’s Disease patients should always be attributed to psychological reaction to a loss of cognitive faculties.
C. Depression in Alzheimer’s Disease patients tends to be mild, indolent in progression, and of gradual onset.
D. Depression in Alzheimer’s Disease patients can express itself obscurely, for example through the presence of aggression, paranoid delusions, or refusal to eat.
E. All of the above.
4. NIMH Provisional Diagnostic Criteria for Depression of Alzheimer Disease include all of the following except which statement?

A. Five depressive symptoms must be present during the same 2 week period in order to diagnose Major Depressive Disorder in an AD patient.

B. Depressed mood, decreased positive affect or pleasure or social isolation or withdrawal may be present.

C. Appetite may be disrupted, decreased, or increased.

D. Sleep may be disrupted.

E. The symptoms do no occur exclusively during the course of delirium.
5. Which of the following is NOT true of the care of dementia patients with behavioral complications?

A. Nonpharmacologic strategies are important in their management, including behavioral analysis of precipitants and consequences of undesirable behaviors.

B. Working with families to help them better manage dementia patients’ behavioral complications has not been shown to delay nursing home placement.

C. Sustaining optimal functioning is aided by maintaining a familiar environment, keeping daily activities routine, and communicating in simple sentences.

D. Attention to caregiver burnout, stress, or depression is an important part of managing dementia patients with behavioral complications.

E. All of the above.
Behavioral Problems Associated with Dementia

- Psychosis
- Agitation
- Aggression
- Depression
- Anxiety
- Insomnia
- Wandering
- Disinhibition
Psychosis, Agitation and Aggression

- Frequently co-exist
- More common in mid/late AD
- Physical aggression less common
- Isolated psychotic symptoms frequent
- Agitation in about 50% of dementia patients
Drugs Used for Behavioral Problems Associated with Dementia

- Anticonvulsants
- Antipsychotics
- Anxiolytics
- Beta blockers
- Cholinergic agents
- Selegiline
- Serotonergic Agents
- Trazodone
- Tryptophan
- Estrogen
- Opiates
Antipsychotic Drugs for Patients with Dementia

- Several studies in dementia indicate equal efficacy among agents
- Provide modest improvement of agitation
- May be more effective for psychosis
- Newer atypical agents show promise
Anxiolytics for Patients with Dementia

- Short-acting benzodiazepines preferred
- Minimum effective dose should be used
- Efficacy data unavailable after 8 weeks
Newer Antipsychotic Drugs

- Clozapine
- Risperidone
- Olanzapine
- Sertindole
- Quetiapine
- Ziprasidone
Anticonvulsants

- Preliminary data suggest efficacy for agitation and aggression
- Principal side effects:
  - carbamazepine: ataxia, sedation, confusion, bone marrow suppression
  - valproate (divalproax): gastrointestinal disturbances, ataxia
Combined Dementia and Depression

- Clinical presentation of dementia syndrome of depression
- Acute onset, rapid progression
- Prior depressive episodes
- Brain disorder causing mood disorder
- Psychological reaction to cognitive losses
NIMH - Provisional Diagnostic Criteria for Depression of Alzheimer Disease

A. Three (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning: at least one of the symptoms is either (1) depressed mood or (2) decreased positive affect or pleasure

{Five (or more)…loss of interest or pleasure}

Note: Do not include symptoms that, in your judgment, are clearly due to a medical condition other than Alzheimer disease, or are a direct result of non-mood related dementia symptoms (e.g., loss of weight due to difficulties with food intake)

{…or mood incongruent delusions or hallucinations}
Criteria - continued

- Clinically significant **depressed mood** (e.g., depressed, sad, hopeless, discouraged, tearful)
  - {most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful)}
- Decreased positive affect or **pleasure** in response to social contacts and usual activities
  - {Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others)}
- Social isolation or withdrawal
Criteria- continued

- Disruption in appetite
  - {Significant weight loss when not dieting or weight gain…or decrease or increase in appetite nearly every day}
- Disruption in sleep
  - {Insomnia or hypersomnia nearly every day}
- Psychomotor changes (e.g., agitation or retardation)
  - {Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
Criteria- continued

- Irritability
- Fatigue or loss of energy
  - ...nearly every day
- Feelings of worthlessness, hopelessness, or excessive or inappropriate guilt
  - ...(which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
  - {Diminished ability to think or concentrate, or indecisiveness, nearly every day...}
Criteria- continued

- Recurrent thoughts of death, suicidal ideation, plan, attempt
  - ...(not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
Criteria- continued

B. All criteria are met for Dementia of the Alzheimer’s Type (DSM-IV-TR)

C. The symptoms cause clinically significant distress or disruption in functioning
   - or impairment in social, occupational, or other important areas of functioning

D. The symptoms do not occur exclusively during the course of a delirium

E. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse or a medication)
   - …or other important areas of functioning
Criteria- continued

F. The symptoms are not better accounted for by other conditions such as Major Depressive Disorder, Bipolar Disorder, Bereavement, Schizophrenia, Schizoaffective Disorder, Psychosis of Alzheimer disease, Anxiety Disorders, or Substance-Related Disorder
Criteria- continued

- **Specify if:**
  - Co-occurring Onset: if onset antedates or co-occurs with the AD symptoms
  - Post AD Onset: if onset occurs after AD symptoms

- **Specify:**
  - With Psychosis of Alzheimer Disease
  - With Other Significant Behavioral Signs or Symptoms
  - With Past History of Mood Disorder
Antidepressant Drugs for Demented Patients

- Efficacy in Alzheimer's disease not thoroughly studied
- Clinically used to treat depressive symptoms
- Drugs with minimal anticholinergic effects (e.g., SSRIs) preferred
Choosing Antidepressants

- Clinical trials indicate generally similar efficacy among antidepressants.
- Controversy remains whether heterocyclics are better for melancholia.
- Choose drugs according to side effect profile:
  - e.g., sedating drug for agitated depression.
  - Consider possible drug-drug interactions, P450 isoenzymes.
Nonpharmacologic Strategies

- Educate caregivers
- Maintain social/family activities as much as possible
- Identify underlying precipitants of troublesome behavior
- Optimize sensory input
- Arrange regular exercise
- Employ familiar surroundings
- Keep daily activities routine
- Use clocks and calendars to maximize orientation
Family Intervention and Nursing Home Placement

Cumulative Proportion of Patients Surviving*

*adjusted for sex, age and income

(Mittelman et al, 1996)
General Management Approaches

- Arrange regular exercise
- Try to maintain social/family activities
- Modulate environment – optimize stimulation levels
- Employ familiar surroundings
- Keep daily activities routine
- Use clocks, calendars, etc.
- Use simple sentence structure and frequent reminders about content of conversation
Other Caregiver Issues

- Rate of depression as high as 50% in primary caregivers of demented patients
- Physical illness, isolation, anxiety, and burnout common
- Alzheimer’s Association offers support and education; chapters in major cities throughout U.S. (800-272-3900)
Post Lecture Exam
Question 1

1. Which of the following complications occur frequently in patients with Alzheimer’s Disease and other dementing orders (choose the best single answer)?
   A. Delusions, hallucinations, agitation
   B. Aggressive behavior, impulsive behavior
   C. Wandering, confusion
   D. Anxiety, insomnia, depression
   E. All of the above
2. Which of the following statements is NOT true?
A. Psychosis, agitation, and aggression frequently co-exist in AD.
B. Olfactory hallucinations are pathognomonic for AD.
C. About half of dementia patients exhibit aggressive behavior at some time.
D. Antipsychotic medications can help in the treatment of agitated behavior.
E. Antipsychotic medications can help in the treatment of psychotic behavior.
3. Which of the following is a true statement about depression and Alzheimer’s Disease?

A. Alzheimer’s Disease patients rarely develop comorbid depression.
B. Depression in Alzheimer’s Disease patients should always be attributed to psychological reaction to a loss of cognitive faculties.
C. Depression in Alzheimer’s Disease patients tends to be mild, indolent in progression, and of gradual onset.
D. Depression in Alzheimer’s Disease patients can express itself obscurely, for example through the presence of aggression, paranoid delusions, or refusal to eat.
E. All of the above.
Question 4

4. NIMH Provisional Diagnostic Criteria for Depression of Alzheimer Disease include all of the following except which statement?

A. Five depressive symptoms must be present during the same 2 week period in order to diagnose Major Depressive Disorder in an AD patient.
B. Depressed mood, decreased positive affect or pleasure or social isolation or withdrawal may be present.
C. Appetite may be disrupted, decreased, or increased.
D. Sleep may be disrupted.
E. The symptoms do no occur exclusively during the course of delirium.
Question 5

5. Which of the following is NOT true of the care of dementia patients with behavioral complications?
   A. Nonpharmacologic strategies are important in their management, including behavioral analysis of precipitants and consequences of undesirable behaviors.
   B. Working with families to help them better manage dementia patients’ behavioral complications has not been shown to delay nursing home placement.
   C. Sustaining optimal functioning is aided by maintaining a familiar environment, keeping daily activities routine, and communicating in simple sentences.
   D. Attention to caregiver burnout, stress, or depression is an important part of managing dementia patients with behavioral complications.
   E. All of the above.
Answers to Pre & Post Competency Exams

1. D
2. B
3. D
4. A
5. B