Medication Management of Dementia-Related Behaviors: When Appropriate?

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HADI Hawai’i Alzheimer’s Disease Initiative

A PROJECT OF THE UH CENTER ON AGING

www.hawaii.edu/aging/hadi
BPSD: to medicate, or not to medicate……

Clear description of behavior
When started? How frequent? Time of day?
What did they do? What did they say?

Interventions
What had been tried? What worked? What did not work
New medications/medical problems?

Quality of Life/Safety
Affect the person’s ability to receive needed care?
Distressing to the patient?
Dangerous action? Provoke/anger other residents?

Monitoring of medication treatment
Dementia Types

- Frontotemporal Dementia
  - (compulsive behaviors, personality changes)
  - MSA/PSP/CBD

- Vascular Dementia
  - (stroke)
  - VD + DAT

- Dementia with Lewy Bodies
  - (parkinsonism, nocturnal visual hallucinations)
  - DAT + DLB
  - DAT

- Dementia of the Alzheimer’s type
  - (DAT)
  - 5% 10% 60%

- 10% 10% 5%

Behavioral treatment usually specific to symptoms, rather than dementia type

Behavioral and Psychological Symptoms of Dementia (BPSD)

Present in 60-98% with dementia

Increased/premature institutionalization

Predicts higher mortality

Suffering for patient and caregiver

Behavioral resources for older adults lagging further behind

“Crisis in geriatric mental health” starting around 2011

Elderly Reliance of Psychiatric ER in Honolulu

Psychiatry emergency service (PES) at Queen’s Medical Center: 22,000 visits from 2007 to 2011, including 1,370 elderly (ages >= 65)

Increased number/percentage of elderly to PES,

Increased percent brought by police, usually due to dangerous acts. A two fold increase (12.5% in 2007 to 24.5% in 2011)!

Oldest patients (ages >=80) needing a psychiatric admission with the highest length of stay (LOS) in the ER (median 8 hours)

Lack of system-wide resources (from outpt to inpatient)

Lu 2017
Behavioral and Psychological Symptoms of Dementia (BPSD)

**Psychosis**
- hallucinations/delusions
- 25%

**Depression**
- 20-40%

**Anxiety**
- often persistent

**Agitation**

**Apathy**

**Altered circadian rhythms**
- disrupted sleep patterns

Clear description of symptom helps to facilitate specific and effective treatment
Psychosis in Dementia

Misidentification of caregivers/surroundings
Paranoid delusions: lost items, accusations, poison
Visual hallucinations: stalkers, stranger in the house

Increases with dementia progression (~25%)
Risk for dangerous action, placement, and mortality

*Leonard 2006, Lopez 2013, Steinberg 2006*
Depression in Dementia

20% in Alzheimer’s
20% - 40% in Vascular dementia
>50% in Parkinson’s Disease dementia

Irritability, self-pity, rejection sensitivity, anhedonia (loss of interest), and psychomotor retardation

Associated with physical aggression, increased mortality rate, and accelerated dementia progression

Agitation/Disinhibition in Dementia

Impulsive and inappropriate behaviors
Often persist or worsen during dementia progression

Examples: verbal/physical aggression (often self-directed), sexual indiscretion, intrusive wandering, impulse buying

Apathy in Dementia

Indifference, lack of motivation, no poor mood/irritability
Up to 70% of dementia, increase with severity

Antidepressant in apathy w/o depression may worsen apathy

Landes 2001
Anxiety in Dementia

- repeatedly asking questions on a forthcoming event:
  - Godot syndrome
- fear of being left alone
- pacing/fidgeting

Circadian Rhythm Disturbances in Dementia

- increased sleep latency (more time to fall asleep)
- Increased awakenings
- sundowning
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Monitoring of medication treatment
Non-pharmacological approaches for BPSD

Identify triggers/unmet needs
ABCs (antecedent, behavior, consequence)

Social contacts/Basic care:
Speak slowly and calmly
Simple/positive commands
Use gestures
Gentle touch
Approach patient from front

Safety:
grab bars, no sharp edges
concealed exits

Non-pharmacological approaches for BPSD

Orientation:
routines, clocks
courage ADLs
hearing aids/written communications

Recreation: exercise, games, singing

Sensory stimulation:
**Music**, white noise,
plants, animals,
massage
aromatherapy

Multisensory:
“Namaste” room
“Snoezelen” room

I am Dr. Lu.

How are you doing today?

Specific symptoms-based approaches for BPSD

Paranoia/Hallucinations
Avoid direct confrontation
Validate their experiences
Re-assurance followed by distraction
Anticipate safety issues (conceal harmful objects)

Anxiety/Fear
Place patient at a busy/high-traffic area
Orientation
Scheduled events/tasks (often individualized)
Scheduled checks
Specific symptoms-based approaches for BPSD

Paranoia/Hallucinations
Avoid confrontation
Reassurance/validate followed by distraction
Safety (hide harmful objects)

Sleep
wake up same time of the day
keep occupied/awake in the day
early evening activities
hallway/bathroom lights

Depression/Cognitive Decline
physical and mental activities
community resource/day programs
Medical Causes of BPSD

Look for medical illness/physical discomfort acute onset (within a few days)/delirum:
  - confusion, paranoia, slurred speech, sedation, urinary changes
  - pain
  - constipation

Minimize medications/drug-drug interactions

Beers criteria:
  - avoid benzodiazepines, anticholinergics, sedatives

Leonard 2006

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Monitoring of medication treatment
Case 1

80yr female w/ Alzheimer’s dementia and recurrent depression

With daughter, severely depressed after a family reunion at home, minimally interactive/few words/poor appetite

Various family visits to simulate “reunion”/family gathering not effective.

Started on antidepressant. Became engaged again. Able to enjoy playing with grandchildren.

Later, when placed at care home due to decreased ADLs, started self-talk/random shouting.

Deferred meds since not dangerous/distressing/disruptive
Medications for Dementia-related Behavior

**Indications:** Poor Quality of Life, Safety Concerns
distressing psychosis/anxiety, severe depression
elopement, physical aggression
to avert institutionalization, emergency services

**Goals of Medications Treatment**
What is the highest quality of life possible, using
medications with the highest benefit to risk ratio?

Desai 2012
## Maintaining Quality of Life in Dementia

<table>
<thead>
<tr>
<th>Symptom Severity</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-pharm approaches</td>
<td>+ appropriate medications</td>
</tr>
<tr>
<td>+ inappropriate medications</td>
<td>non-pharm approaches</td>
</tr>
<tr>
<td>no treatment</td>
<td></td>
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</tbody>
</table>
When Pharmacological Interventions?

Losing interest
Crying
Irritable
Declining care
Avoiding eye contact
“Ready to die”

Physically avoidant or aggressive action to refuse food/basic care

Always angry/critical, verbal and physical threats/aggression toward others

“I want to die!”, “Kill me!”, repeated attempts to harm self

Depression Severity

non-pharm interventions

medications
When Pharmacological Interventions?

Accusations/things stolen
Feeling persecuted
Seeing things/people

“I don’t belong here”
“I don’t feel safe”
“People are mean”

Attacking caregivers or others due to Perceived threats
Elopement involving dangerous means
Constant distressing fear impairing Ability to receive essential care

Psychosis Severity

non-pharm interventions

medications
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Case 2

75 yr male with Parkinson’s dementia, brought by family after attacking hired caregivers thinking they were intruders

Recent addition of antipsychotics, Ativan (lorazepam), Depakote (valproate) lessened his aggression, but family and PCP concerned about sedation

Patient with tremor, unable to walk due to stiff arms/legs, lethargic, and with loud screams when more alert

Ativan tapered and replaced by trazodone (for screaming/anxiety). Risperidone tapered and replaced by prazosin (for physical aggression)

Able to walk again, became more alert, and able to express his needs. Would “hide” rather than attack visitors
Medications for Dementia-related Behavior

No “FDA-approved” medication for behavior in dementia

Transfer Decision-making (POA) Appropriately
Informed consent with family members/guardian

Clear symptom description allows specific, effective plans

Antidepressants:
  improve mood/agitation, less side effects
Antipsychotics/benzodiazepines (tranquilizers):
  can also help, more sedation/serious side effects
Dementia medications (slow down decline by ~6 months):
  smaller improvement in behavior
Monitoring Medications for Dementia Behavior

Effective?
-start with low dose, to ensure tolerability
-may need up to 2-6 weeks for sustained improvement
-if behavior persist during this time,
  -not necessarily due to “medication side effects”
  -not necessarily due to “medications not working”

Side Effects?
Clear changes from baseline:
  sedation, falls, insomnia, confusion, constipation, agitation, disinhibition, decreased appetite
Medication-specific Side Effects

Antidepressants (citalopram, escitalopram, sertraline, trazodone, mirtazepine): nausea, diarrhea, sedation, falls, insomnia, confusion (low sodium)

Antipsychotics (haloperidol, risperidone, olanzapine, quetiapine, aripiprazole): tremor, stiffness, sedation, falls, higher risk of stroke and irregular heart rate

Benzodiazepines (lorazepam, alprazolam, diazepam, temazepam): sedation, confusion, disinhibition, falls, physical dependence

Mood stabilizers (valproic acid): sedation, tremor, stomach upset, rash, edema

Prazosin: low blood pressure
Case 3

90 yr female w/ Alzheimer’s dementia, no previous psych hx

At LTC, paranoid, attacking staff/residents, adding to numerous falls. Poor sleep/appetite. Hostility difficult to predict despite various interventions. Considered for discharge.

When medications attempted, would be stopped whenever she fell or agitated, due to concern that it is med-related. But aggression/psychosis continued

Discussed with family/LTC regarding importance of adequate medication trial. So again placed on low dose antipsychotic

A few weeks later, had decreased paranoia and falls. Able to be in activities. Now with pending trial o antipsychotic decrease
Responsible Medication Use: Better long-term outcomes

When used for disruptive behaviors (psychosis, aggression, agitation), antipsychotics use in dementia not associated with greater nursing home admission or mortality

Rather, it is the debilitating levels of depression, psychosis, aggression that accelerate cognitive/physical decline, poorer quality life, and premature institutionalization

“judicious use of pharmacological interventions, including antipsychotics, is appropriate, necessary, and ethically justified…”
Thank You

Questions?