Improving People's Lives Through Innovations in Personalized Health Care

Management of Common Behaviors in Dementia

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Objectives

- Identify target behavioral symptoms
- Provide a practical approach to the management of behavioral disturbances in MCI and dementia
- Behavioral Modification Techniques
- Utilize a rational approach to polypharmacy

Scharre DW. Behavioral Approaches in Dementia Care. Practical Neurol 2021;20:35-40

Spectrum of Behavioral Disturbances in Dementia

72%	Apathy	38%	Depression/Dysphoria
70%	Delusions	36%	Disinhibition
60%	Aggression/Agitation	18%	Sundowning
48%	Anxiety	15%	Hallucinations
46%	Psychomotor Disturbance	3%	Hypersexuality
42%	Irritability/Lability	2%	Euphoria
42%	Sleep/Wake Disturbance	2%	Obsessive-Compulsive

Common Underlying Behaviors

- Environmental disruption causing behaviors
- Psychosis
- Depressive symptoms
- Apathy
- Anxiety
- Irritability and agitation

Common Underlying Behaviors

- Mood lability, disinhibition, intrusiveness, euphoria, and mania
- Sleep disturbances
- Eating disturbances
- Hypersexuality
- Aberrant motor behaviors
- Obsessive-compulsive traits

General Guidelines for Behavioral Management

- Identify each behavioral symptom
- Determine if symptom is causing **Significant Impact** – Symptom is:
  - Markedly disturbing to the individual or caregivers
  - Seriously disruptive to the individual's daily life activities
  - Concerning for the safety of the individual or others
- Assess and treat potential non-dementia causes (infection, dehydration, pain, medications, medical conditions)

General Guidelines for Behavioral Management

- Consider nonpharmacologic approaches in all cases of behavioral symptoms including strategies directed towards caregivers, individuals, and environment
- For each behavior of **Significant Impact**, consider pharmacologic and nonpharmacologic interventions **immediately**
- Assess potential risks and benefits of pharmacotherapy in light of the type of dementia and the individual's goals of care

General Guidelines for Behavioral Management

- Initiate pharmacologic agents at a low dose and systematically titrate up to the minimum effective dose as tolerated with regular monitoring for effectiveness and side effects
- Try alternative pharmacotherapy when effectiveness is not achieved or significant adverse events are noted
- Reduce the dose of the pharmacotherapy gradually if the specific behavioral symptom is not longer of **Significant Impact**

General Guidelines for Behavioral Management

- Avoid prescribing medications for chronic behavioral symptoms on an “as needed” (prn) basis to ensure steady state drug delivery
- Avoid or use with caution, anticholinergic medications (e.g. antihistamines, certain sleep and urinary control treatments, tricyclic antidepressants, and some typical antipsychotics)
- Avoid benzodiazepines when possible, because of adverse effects

General Principals of Behavioral Management

- Provide adequate supervision
- Provide an open, safe, contained environment
- Correct sensory deprivation
- Increase lighting to reduce evening and nocturnal confusion
- Control overstimulating environments
- Avoid ER to control behaviors
- Educate caregivers

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Sudden Changes in Behavior: Always Consider

- Check for infection and dehydration
- Evaluate for changes in medical conditions
- Watch for adverse medication effects: Stop or adjust any new medication added
- Assist with pain management

- In hospital setting: get a sitter to reassure, calm, redirect
- Try behavioral modification techniques
- Environmental modification for reactive aggression

Behavior Modification Approaches

Strategies directed towards individuals

- Gentle, calm approach
  - Approach slowly
  - Pleasant tone of voice
  - Verbal explanation to patient before care
  - Don’t rush or move patients too quickly

Behavior Modification Approaches
Strategies directed towards individuals

- Non-verbal Communication
  - Always smile
  - Use an open posture
  - Positive gestures:
    - nod yes
    - wave hello
    - shrug shoulders
    - pat on the back
  - Hand them objects they like for distraction


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Behavior Modification Approaches

Strategies directed towards individuals

- Reassurance
  - Everything is fine
  - Compliment: look nice, good job, thank-you
- Empathize with concerns
  - Don’t argue
  - Don’t be a stickler for the truth
  - Acknowledge their statements
  - Keep it simple

Behavior Modification Approaches

Strategies directed towards individuals

- Don't boss
  - People don't like to be told what to do and when to do it
  - Avoid commanding, demanding, or instructing
  - Make them think it is their idea
  - "Are you going to take a bath before we go see the doctor?"
  - "I'm taking a bath. Do you want to go first?"

Behavior Modification Approaches

Strategies directed towards individuals

- Distraction and Redirection
  - Verbal redirection
  - Object distraction
  - Food distraction
  - “Can you help me?”
- Maintain routines to avoid disorientation
- Increase daytime acitivities


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Behavior Modification Approaches

Strategies directed towards individuals

- Utilization behaviors
  - Normal behavior; inappropriate time or place
  - Push grocery cart, fold clothes to reduce unwanted behaviors
- Out of sight, out of mind
  - Keep objects/food out of sight to avoid unwanted behaviors
  - Cover or remove mirrors

Behavior Modification Approaches

Strategies directed towards caregivers

- Caregiver education and resource support
- Person-Centered Care (PCC) approaches
- Dementia Care Mapping (DCM)
- Treatment Routes for Exploring Agitation (TREA)
- Tailored Activity Program (TAP)
- Describe-Investigate-Create-Evaluate (DICE)

General Principals of Behavior Pharmacotherapy

- Behavioral drugs for dementia is mostly off-label
- Treat specific underlying behaviors
- Polypharmacy is OK: Patients may have several behaviors that are best treated with different medications
- Individualize
- Use very low doses: 1/2 to 1/3 dose
- Avoid as needed (prn) behavior treatments
- Review ongoing need

Delusions

- People are stealing things
- Paranoia/suspiciousness
- Unwelcome visitors
- One's house is not one's home
- Spouse is an imposter
- Delusion of infidelity/abandonment
- Mirror sign
- TV characters are real

Behavior Modification Techniques

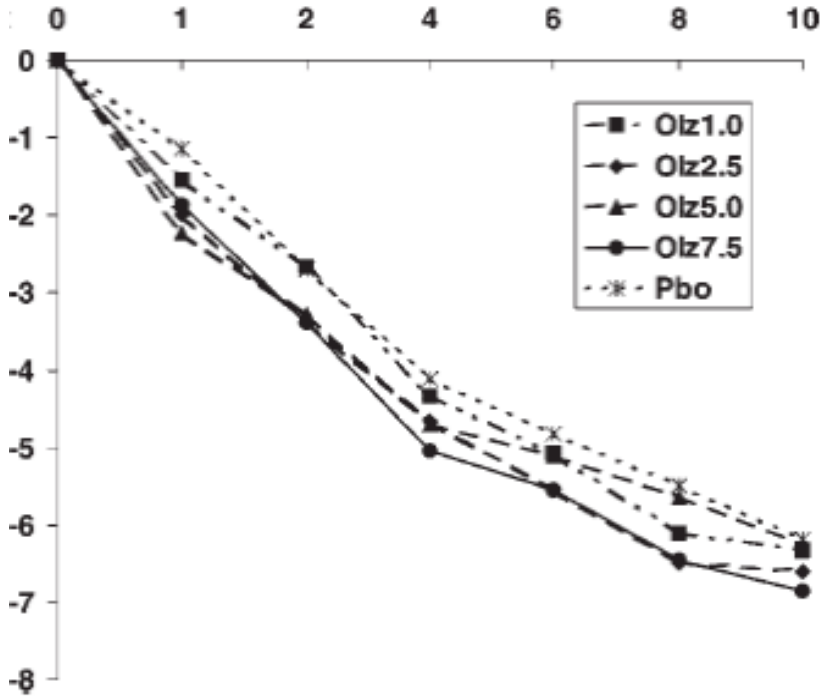
- Suspiciousness, Delusions, Hallucinations, Psychosis
  - Maintain routines
  - Avoid unfamiliar environments
  - Correct sensory impairments
  - Medications are not needed if psychotic symptoms not disturbing to patient or caregiver

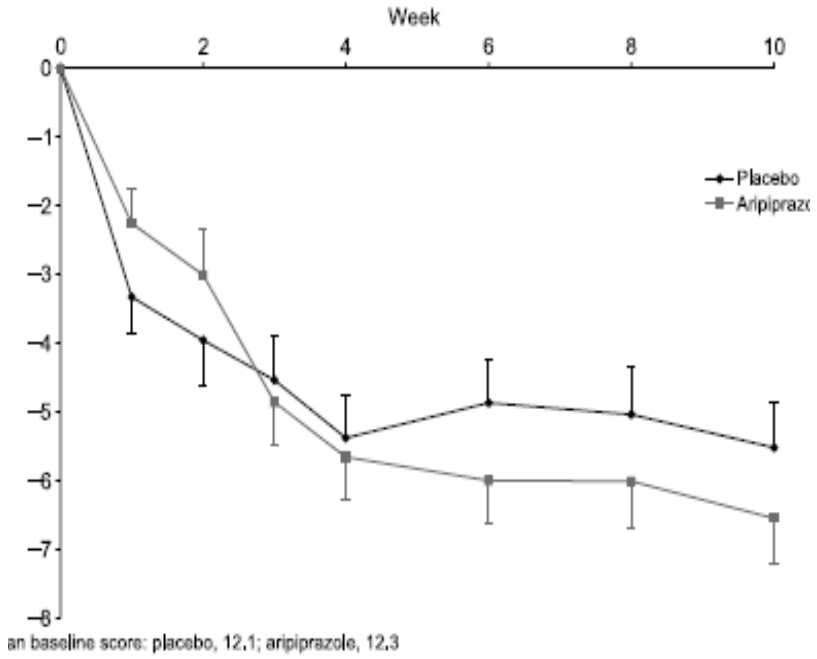
CATIE Trial for antipsychotic use in AD

- Double-blind, placebo-controlled trial in AD with psychosis or agitation for 36 weeks comparing olanzapine, quetiapine, risperidone, and placebo
- No significant improvement in symptoms
- 24%-16% on drug discontinued due to intolerability vs 5% on placebo
- Conclusion: Adverse effects offset advantages in the efficacy

Schneider LS, et al. N Engl J Med 2006;335:1525-1538

Olanzapine or Aripiprazole: NPI Psychosis Scale





DeDeyn PP, et al. Int J Geriatr Psychiatry. 2004;19:115-126.

Preferred Approaches for Psychosis in Dementia

First line preferred treatments

1. Quetipine*, ziprasidone, risperidone*
2. Brexpiprazole*, olanzapine*, aripiprazole*

Second line preferred treatments

1. Haloperidol*
2. Clozapine
3. Pimavanserin (PD psychosis)

Avoid: Thioridazine

*Positive double-blind studies

Depression

- Depressed mood; loss of interest or pleasure
- Serotonin and norepinephrine deficiencies
- In AD, depression reported in 14% - 85%; usually not major depressive disorder
- 70% of caregivers moderately to highly distressed with patient's depression
- Depression common in Huntington's disease and vascular dementia

Behavior Modification Techniques

- Depression
  - Increase pleasurable activities
  - Daycare or other stimulation

Preferred Approaches for Depression in Dementia

First line preferred treatments

1. Sertraline*, citalopram*, escitalopram
2. Paroxetine*, fluvoxamine*, fluoxetine

Second line preferred treatments

1. Venlafaxine, bupropion, mirtazepine
2. Trazodone*
3. Lamotrigine
4. Clomipramine*, nortriptyline, desipramine

Avoid: tertiary tricyclic anti-depressants

*Positive double-blind studies

Apathy

- Lack of motivation, social withdrawal, and diminished interest in any activities
- Can occur without depression when crying is absent and mood is not sad
- Seen in over 70% of AD patients
- Can be profound in frontal lobe dementia and dementia with Lewy bodies

Preferred Approaches for Apathy in Dementia

First line preferred treatments

1. Donepezil* and other cholinesterase inhibitors
2. Fluoxetine and other SSRIs

Second line preferred treatments

1. Psychostimulants: Methylphenidate, modafinil, others
2. Amantadine, carbidopa/levodopa, bromocriptine, bupropion
3. Risperidone and other atypicals
4. Sodium valproate

*Positive double-blind studies

Anxiety

- Worry, nervousness, phobias, fear of being left alone, and somatic complaints
- Godot syndrome - Anxiety regarding upcoming events
- Common early in dementia
- Can lead to irritability and aggression

Behavior Modification Techniques

- Anxiety
  - Check for pain, dyspnea, thirst, toileting needs
  - Calming techniques
  - reassurance

Preferred Approaches for Anxiety in Dementia

First line preferred treatments

1. SSRIs*, trazodone

Second line preferred treatments

1. Divalproex*
2. Gabapentin
3. Buspirone
4. Donepezil*, galantamine*, rivastigmine
5. Propranolol and other beta-blockers
6. Olanzapine*, atypical antipsychotics

Avoid: benzodiazepines

*Positive double-blind studies

Mood Lability

- Usually short-lived in AD
- Pseudobulbar palsy, pathologic crying, inappropriate laughter common in
  - PSP
  - some vascular dementias
  - frontotemporal dementias

Disinhibition, Impulsivity, Intrussiveness

- Caused by impulsivity and poor judgment
- Often leads to intrusiveness
- Not typically severe in AD
- Very common in frontal lobe dementias

Euphoria and Mania

- Decreased need for sleep, racing thoughts, distractible, pressured speech, and psychomotor agitation
- Rare in AD
- Look for secondary causes

Treatment of Mood Lability, Disinhibition, Intrusiveness, Euphoria, and Mania in Dementia

Anticonvulsants: Good mood stabilizing properties but studies are lacking in dementia; Divalproex well tolerated from 125 bid to 1000 in 2 to 3 divided doses and sprinkle formulation easy to give

SSRIs: Studies show help with lability, social dysdecorum, disinhibition; watch for mania

Cholinesterase inhibitors: Reduce disinhibition

Olanzapine: decreases disinhibition & euphoria

Preferred Approaches for Mood Lability, Disinhibition, Intrusiveness, Euphoria, and Mania in Dementia

First line preferred treatments

1. Divalproex
2. Dextromethorphan/quinidine

Second line preferred treatments

1. Citalopram*, SSRIs
2. Gabapentin, lamotrigine and other anticonvulsants
3. Galantamine*, rivastigmine
4. Olanzapine* and other atypicals

Avoid: lithium

*Positive double-blind studies

Sleep Disturbances

- Diurnal rhythm (sleep/wake cycle) disruption; repetitive wakenings; insomnia
- Disorientation and confusion in the evening or night (sundowning) often due to loss of sensory stimuli and fatigue; can lead to agitation and wandering

Behavior Modification Techniques

- Sleep/Wake Cycle Disturbance
  - Regular sleep habits
  - Avoid naps
  - Increase daytime activities
  - Avoid late meals, caffeine, alcohol

Preferred Approaches for Sleep Disturbances in Dementia

First line preferred treatments

1. Trazodone*
2. Zolpidem
3. Melatonin*

Second line preferred treatments

1. Mirtazepine, nortriptyline if depressed
2. Quetiapine, risperidone*, olanzapine, if psychotic
3. Valproate if also restless, intrusive, or manic
4. Gabapentin

Avoid: barbiturates, benzodiazepines, hydroxyzine, diphenhydramine

*Positive double-blind studies

Aberrant Motor Behaviors

- Wandering occurs in 3% - 26% of AD
- Psychomotor activity disturbances include:
  - motor restlessness - hyperkinesis
  - purposeless activities - pacing
  - hoarding & hiding items - packing/unpacking
  - dressing/undressing - hyperverbalness
  - intrusive touching - pounding/tapping
  - insistent verbal repetition - singing

Behavior Modification Techniques

- Psychomotor Activity Disturbance
  - Allow wandering in a safe, contained environment
  - Planned regular exercise, walking

Preferred Approaches for Aberrant Motor Behaviors in Dementia

First line preferred treatments

1. Divalproex*
2. Citalopram
3. Galantamine*, rivastigmine

Second line preferred treatments

1. Sertraline, paroxetine, trazodone
2. Risperidone*, quetiapine
3. Gabapentin

*Positive double-blind studies

Obsessive-Compulsive Traits

- Traits not obsessive-compulsive disorder
  - ritualistic behaviors
  - repetitive behaviors
  - pacing or walking in a very set path
  - excessive ritualistic touching
  - counting behaviors
  - yelling or moaning behaviors

Behavior Modification Techniques

- Obsessive-Compulsive Traits
  - Provide activities (fold clothes…)
  - Adequate supervision

Preferred Approaches for Obsessive-Compulsive Traits in Dementia

First line preferred treatments

1. Fluvoxamine
2. Other SSRIs

Second line preferred treatments

1. Clomipramine
2. Risperidone and other atypical antipsychotics

Agitation/Aggression

- Reactive
- Due to psychosis, delusions
- Due to restlessness, wanting to go
- Due to anxiety, fear
- Due to intrusiveness, disinhibition
- Due to possessiveness

Preferred Approaches for Agitation/Aggression in Dementia

First line preferred treatments

1. Citalopram*, trazodone*, sertraline
2. Divalproex sodium*
3. Quetiapine*, ziprasidone, risperidone*, brexpiprazole**, olanzapine*, clozapine

Second line preferred treatments

1. Fluvoxamine*, fluoxetine, paroxetine
2. Carbamazepine*, propranolol*, buspirone

*Positive double-blind studies
**FDA approved for agitation due to AD dementia

Preferred Approaches for Agitation/Aggression in Dementia

With psychotic and delusional features

1. Quetiapine, ziprasidone, risperidone, olanzapine, clozapine

With restlessness and wanting to go

1. Divalproex sodium
2. Citalopram and other SSRI's

Preferred Approaches for Agitation/Aggression in Dementia

With anxiety or fear

1. SSRI's
2. Divalproex sodium

With intrusiveness or disinhibition

1. Divalproex sodium
2. SSRI's

Summary

- Identify specific underlying behaviors
- Put yourself in the patient's shoes
- Look for environmental triggers
- Check for medical causes of behaviors
- Ensure patient's basic needs met (comfort, food, drink, sleep, toileting, activity)
- Educate caregivers on techniques

Summary

- Treat specific underlying behaviors
- Polypharmacy is typical
- Use very low doses
- Avoid benzodiazepines and anticholinergics

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