BEHAVIORAL DISTURBANCES IN DEMENTIA

AGS Geriatrics Evaluation and Management Tools (Geriatrics E&M Tools) support clinicians and systems that are caring for older adults with common geriatric conditions.

From the AMERICAN GERIATRICS SOCIETY

Geriatrics Evaluation & Management Tools

BACKGROUND

All patients with dementia should be screened for behavioral symptoms, because these symptoms are common and increase caregiver stress, patient injury, and risk of institutionalization.

SCREENING

"Have there been any bothersome behavioral disturbances since the last visit?"

Examples of Behavioral Disturbances in Dementia

- Repetitive vocalizations
  - Constant unwarranted requests for attention or help
  - Repetitive sentences or questioning
- Psychomotor hyperactivity
  - Inappropriate dressing or disrobing
  - Repetitive nonpurposeful movements
  - Picking at self
  - Opening and closing cupboards
- Physical aggression
  - Pushing
  - Grabbing
  - Spitting
  - Scratching
  - Hitting
  - Biting
  - Kicking
  - Throwing items
  - Destroying property
- Self-neglect
- Resisting help with personal care
- Anger and irritability
  - Complaining
  - Cursing
  - Screaming
- Manic-like behavior
  - Pressured speech
  - Emotional lability
  - Disinhibition
  - Impulsivity
  - Irritability
  - Psychomotor hyperactivity
  - Reduced sleep
  - Hypersexuality
- Disturbance of sleep cycle
  - Sleeping throughout day; awake throughout night
  - Insomnia
- Psychosis
  - Hallucinations
  - Delusions
  - Paranoia
- Depressive symptoms (sadness, tearfulness, lack of interest in activities or eating)
- Inappropriate sexual behavior
- Pacing or wandering

HISTORY OF PRESENT ILLNESS

- Description of specific behavioral disturbance (refer to screening examples, above); obtain information from patient and an informant
- Document the following information:
  - Specific behavioral disturbance
  - Triggers for the behavior (physiological, environmental, and communication)
  - Timing, onset, frequency, and duration of the behavior
  - Severity/impact of the behavior—is the patient or caregiver at risk of harm?
  - Attempted nonpharmacologic and pharmacologic interventions and their outcomes
  - Previous successful treatment strategies
- Rating scales such as the Cohen-Mansfield Agitation Inventory (CMAI), the Neuropsychiatric Inventory (NPI), and the Behavioral Pathology in Alzheimer Disease Rating Scale (BEHAVE-AD) can be used to quantify symptoms based on caregiver interview.

PAST MEDICAL AND SOCIAL HISTORY

- Investigate underlying medical or psychiatric disorders that could be contributing to behavior.
- Document medication, alcohol, and substance use that could be contributing to behavioral disturbances.
- Assess caregiver stress levels.
- Assess patient's risk of elder mistreatment.

MEDICATIONS

Thoroughly review all medications, especially anticholinergics, and determine if they contribute to behavior.

PHYSICAL EXAM

Perform a comprehensive exam to identify physiologic triggers for behavioral problems.

NONPHARMACOLOGIC MANAGEMENT

- **Nonpharmacologic interventions have been shown to be more effective than pharmacologic treatment for behavioral disturbances in dementia and therefore should always be attempted first.**
- Provide resources and support for caregivers.
  - Free educational resources such as www.nia.gov/alzheimers
  - Referral for respite services when indicated.
- Treat underlying physiologic, environmental, and caregiver communication triggers.
  - Catastrophic reactions are acute, strong emotional reactions that occur when patients are confronted with confusing or stressful situations. They are best managed by avoiding triggers that precipitate the behavior.

Physiologic Triggers	Environmental Triggers	Communication Triggers
■ Discontinue inappropriate medications (eg, anticholinergics). ■ Encourage patients to use their glasses and hearing aids. ■ Offer food and drink.	■ Provide regular daily routine, activities, and structure. ■ Provide a comfortable, familiar living environment. ■ Provide the same caregiver if possible. ■ Engage patients in simple daily activites according to ability.	■ Show a warm, kind, matter-of-fact manner. ■ Make eye contact. ■ Provide simple step-by-step instructions. ■ Ask questions with limited choices such as, "Would you like water or milk?" rather than open-ended questions such as "What would you like to drink?"

NONPHARMACOLOGIC MANAGEMENT (cont'd)

Physiologic Triggers	Environmental Triggers	Communication Triggers

■ Provide appropriate physical exercise such as a walk (to improve sleep/wake cycle disturbances).
■ Treat symptoms such as pain, constipation, urine retention, nausea, dyspnea, if present.
■ Evaluate and treat according to goals of care:
  ■ Endocrine and metabolic disorders (blood sugar, thyroid, etc)
  ■ Infections (pneumonia, urinary tract infection, dental caries, etc)
  ■ Cardiovascular disorders
	■ Avoid overstimulation (noise, TV, crowds).
	■ Avoid social isolation.
	■ Refer patient to adult day care programs if needed.
	■ Consider music therapy.
		■ Allow patient to make decisions whenever possible, and avoid domineering communication styles.
		■ Reassure or redirect patient.
		■ Avoid frequent corrections; say "Please do this," instead of "Don't do this."
		■ Stay calm and patient when speaking, and avoid tense body language.
		■ Don't argue with the patient.
		■ Don't talk about the person as if he or she isn't there.

PHARMACOLOGIC MANAGEMENT

- **Pharmacologic treatment of behavioral disturbances in dementia is of limited efficacy and should be used only after nonpharmacologic interventions have been implemented.**
- Treat behavior with targeted pharmacotherapy (see table below) if behavior is unresponsive to documented attempts at nonpharmacologic management and benefits of treatment outweigh risks, or if there are documented concerns for patient or caregiver safety.
- All medications for behavioral disturbances in dementia are used off-label with serious adverse effects; therefore, document a risk-benefit discussion before beginning treatment.
- For detailed information on medication dosages, benefits, adverse reactions, and monitoring, refer to *Geriatrics Review Syllabus* chapter on Behavioral Problems in Dementia.

Target Behavior	Medication Class/Daily Dose	Comments
■ Depression	Antidepressants	■ See AGS Geriatrics Evaluation & Management: Depression
■ Psychosis (eg, delusions, hallucinations, paranoia) ■ Anger ■ Physical aggression	Antipsychotics: Dosage (mg/d) ■ Aripiprazole: 2–20 mg ■ Asenapine: 5–10 mg ■ Clozapine: 12.5–200 mg (poorly tolerated by older adults) ■ Haloperidol: 0.5–3 mg ■ Iloperidone: 1–12 mg ■ Lurasidone: 40–80 mg ■ Olanzapine: 2.5–15 mg ■ Paliperidone: 1.5–12 mg ■ Perphenazine: 2–12 mg ■ Quetiapine: 25–200 mg ■ Risperidone: 0.5–2 mg ■ Ziprasidone: 40–160 mg	■ Carry an FDA black box warning of increased risk of mortality in patients with dementia (the rate of death was about 4.5% in drug-treated patients and about 2.6% in the placebo group). The FDA has indicated that risks/benefits of treatment should be reviewed and documented carefully with caregivers before starting therapy. ■ Significant adverse events, including extrapyramidal symptoms (such as parkinsonism and tardive dyskinesia), sedation, orthostatic hypotension, falls, hyperglycemia, cerebrovascular events, and increase in all-cause mortality in patients with dementia. ■ Patients with dementia in Lewy bodies are extremely sensitive to the extrapyramidal symptoms of antipsychotic medications and cannot tolerate even low dosages. ■ In patients with Alzheimer's disease there is an increase in hospital days following initiation of antipsychotic medication.

■ Manic-like behavior	Mood stabilizers
	■ Depakote 250–2000 mg/d
	  ■ Starting dose 125 mg q12h
	  ■ Slowly titrate upward while monitoring for adverse effects.
	  ■ Serum levels of 50–100 mcg/mL have been shown to be effective.
	■ Lamotrigine 25–200 mg/d
		Depakote
		■ Better tolerated than other mood stabilizers in older adults
		■ May cause nausea, GI upset, ataxia, sedation, hyponatremia
		■ Monitor CBC, platelets, liver function tests at baseline, with dosage increases, and every 6 months
		Lamotrigine
		■ May cause skin rash, Stevens-Johnson syndrome (rare), dizziness, sedation, neutropenia, anemia
		■ Increased adverse events and interactions when used with divalproex
		■ Slow-dose titration required to prevent Stevens-Johnson syndrome
		Carbamazepine and lithium
		■ Poor tolerability in older adults

■ Disturbance of sleep cycle	■ Melatonin 3–5 mg qhs ■ Mirtazapine 7.5 mg starting dose (7.5–15 mg usual dose) qhs ■ Trazodone 25–50 mg starting dose (25–150 mg usual dose) hs (at bedtime)	■ Refer to *"Nonpharmacologic Management"* section of AGS Geriatrics Evaluation & Management: Insomnia. ■ Avoid use of benzodiazepines and antihistamines for sleep because of risk of falls, fractures, disinhibition, and cognitive disturbance. ■ There have been no controlled trials of zolpidem or zaleplon in sleep disturbances secondary to dementia.
■ Dangerous, aggressive sexual behavior	Antidepressants ■ Sertraline 25-100mg/d (may reduce libido) ■ Clomipramine 25mg-100mg/d (when obsessive behaviors are present) Antiandrogens ■ Oral progesterone 5 mg/d starting dose (adjusted to suppress serum testosterone below normal) ■ Leuprolide acetate 5–10 mg IM every month (if behaviors are suppressed by oral progesterone)	

CHOOSING WISELY

- Do not use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia.
- Do not use benzodiazepines or other sedative-hypnotics in older adults as first-choice for insomnia, agitation, or delirium.