The Sane Use of Psychotropic Medications

Steven Levenson, MD, CMD
Key Concepts

- What challenges do nursing homes and physicians face related to addressing behavioral symptoms and altered mental function?
- How do nursing homes and practitioners handle acute problematic behavior and altered mental function? Is the approach optimal?
- What are key roles of the primary care practitioner and psychiatric consultant?
Key Concepts

- Problematic behavior and altered mental function
  - Symptoms or syndromes (collections of signs and symptoms) needing careful evaluation and thoughtful management
- Disease or organ dysfunction may cause or affect behavior
- Disruptive or problematic behavior itself is not an illness or disease
In the Nursing Home

- Broad range of behavior
  - Some behavior reflects diverse personalities and life experiences
- Some behavior is distressed, dysfunctional, disturbing, or disruptive
  - With or without impaired mood and cognition
- Allegedly problematic behavior often comparable to what occurs in society
Managing Behavior Symptoms

- Many situations manageable without hospitalization, psychiatric consultation

- Not helpful to:
  - Respond emotionally and irrationally
  - Give medications to “control” behavior
  - Request immediate hospital / ER transfer

- Common responses
  - Call the police
  - Get a psychiatric consultation
Psychiatric Practitioners

- Use judiciously
  - At least get story straight and define the issue in detail (i.e., what is happening) first
  - Involvement sometimes helpful, sometimes unnecessary or insufficient or not readily available
- Overreliance on psychiatric consultation may cause harm
  - If substitutes for prompt recognition and management of medical causes
Recognition

- How do we identify individuals who may have acute problematic behavior and altered mental function?
Levels of Assessment

- Several levels of assessment
  - Basic recognition, documentation, and reporting of symptoms and risk factors
  - More detailed description of findings and investigation of causes
  - Interpret findings as basis for interventions
Assessment Challenges

- Behavior is a symptom, like others
  - Unlike many other symptoms or condition changes, problematic behavior often affects other patients and staff
  - Often produces a sense of alarm and urgency to stop the symptom ASAP

- Professional approach
  - Important to assess behavioral symptoms and altered mental function in much the same way as other symptoms
Recognition Phase: Goals and Principles

- Identify those who have or are at risk for problematic behavior or altered mental function (including delirium)

- Principles
  - Tell the story
  - Characterize problems and risks in enough detail to permit effective interventions
  - Don’t be led down the wrong path by limiting scope of discussion
Identify Situation

- Identify current behavior, mood, cognition, and function

- Several routes to identifying behavior issues or altered mental function (including delirium)
  - Symptoms
    - Patient exhibits problematic behavior or change in mental function
Recognition of Confusion

- Has patient or family reported a change in cognition or behavior?
- Does transfer sheet from nursing home, ALF, or transferring facility indicate “altered mental status”?
  - Reports from transferring MD, nurses, CNAs
- Does behavior observed in the emergency room indicate “altered mental status”?
- Does initial visit with patient indicate a problem?
Define the Situation

- Identify current behavior, mood, cognition, and function
- Review history
  - Recent and prior
- Observe patient in various situations
- Identify and document pertinent details
  - How the patient looks, thinks, and acts
  - Affect, appearance, insight, judgment, sensorium, thought content & process
Importance of Adequate Information
What are some important details of current behavior and mental function?
Details Count

- Symptom details are essential
- Example
  - “Agitation” commonly used to describe diverse neuropsychiatric symptoms including irritability, restlessness, aggression, screaming, rummaging, resistance to care, and disinhibition
  - Common practice of documenting or treating “agitation” lacks clinical value
    - Needs more precise symptom description
Defining Behavioral Issues: Details

- Nature and relevant factors
  - Onset, preceding factors or triggers

- Course
  - Duration and frequency, continuous or intermittent, compared to usual

- Severity
  - Consequences of the behavior or change in mental function, reason why situation is problematic, danger to patient/others
History is Most Important (1992)
History is Most Important (1975)
Coordinated Approach

- Diverse staff contribute information
  - At least some staff should be able to use some specific terminology
  - For example, is someone calm or restless, is speech understandable and clear

- Licensed staff and practitioners
  - Should be able to provide more detail, using appropriate professional terminology
  - Basic neurological, mental status exam and some detailed behavioral observations
Commonly Used Terms

- What are some commonly used terms in relation to behavior and mental function?
Some Definitions

- Cognition
  - Actions related to obtaining and interpreting information, including learning, memory, perception, and thinking

- Behavior
  - An individual’s actions and reactions
Some Definitions

- **Altered mental function**
  - Significant change in alertness, mood or cognition that impacts an individual’s function, comfort, safety, or social interactions

- **Mental status**
  - An individual’s overall level of consciousness, awareness and responsiveness to the outside world
Definition of “Confusion” ¹,²

- Clouding of consciousness
- Disorientation
- Mixed up
- Confounded
- Perplexed
- Unclear
- Uncertain
- Flustered

Altered mental state

¹ American College Dictionary ² Roget’s International Thesaurus
Delirium

What is delirium, and how does it relate to acute problematic behavior and altered mental function?
Delirium

- Delirium
  - A change in brain function due to a medical illness of acute or subacute onset, which presents with psychiatric symptoms, including
    - Disturbance of consciousness and attention
    - Change in cognition (e.g. perception, thought, and memory) and/or
    - Perceptual impairments (illusions, hallucinations, or delusions)
Delirium: Tools to Help Identify

- Confusion Assessment Method (CAM)
  - Based on consideration of 11 different issues
- Lead to answering 4 questions
  - Is change in mental status acute and does it fluctuate throughout the day?
  - Patient difficulty in focusing attention?
  - Disorganized or incoherent speech?
  - Altered level of consciousness?
Delirium: Tools to Help Identify

- CAM Interpretation
  - Delirium suggested if 1 and 2 and either 3 or 4 are true
Delirium: Varieties

- Delirium-related disorders have common symptom presentation of disturbed consciousness and cognition
- May have different etiologies
  - Delirium due to a general medical condition
  - Substance-induced delirium
  - Delirium due to multiple etiologies
  - Delirium not otherwise specified

Adapted from DSM-IV (APA, 2000)
ASSESSMENT
Using the Information

- What do we do with the information that has been obtained about behavior and mental function?
  - A: Think carefully and systematically about causes

- How can we try to identify causes of acute problematic behavior and altered mental function?
Cause Identification

- Identify cause(s) of problematic behavior and altered mental function

- Systematic approach helps identify causes of problematic behavior and altered mental function
  - Begins with detailed description of current behavior, function, and mental status in proper context
History is Most Important (1992)
History is Most Important (1975)

![Bar chart showing After History as the most important aspect in 1975.]]
Identify Causes

- “Obvious” can sometimes be misleading or provide only part of the explanation.
  - For example, do not assume environmental causes until others considered.
- MDS and RAPs are not designed to serve comprehensive, orderly, or timely approach to defining specific causes.
Identify Medical Causes

- **Review for medical illnesses with or without delirium**

- Consider based on history, known diagnoses, current signs and symptoms, risk factors, current medication regimen

- If evaluations and tests thus far do not reveal a specific cause
  - Consider additional medical, neurological, psychological, or psychiatric assessment
Medical Conditions: Acute or Abrupt Onset

- Medication adverse consequences
- Fluid and electrolyte imbalance
- Infections
- Hypoglycemia or marked hyperglycemia
- Acute renal failure / Acid-base imbalance
- Acute hepatic failure
- Respiratory failure, hypoxia, CO2 retention
Medical Conditions: Acute or Abrupt Onset

- Cardiac arrhythmia, myocardial infarction, or congestive heart failure
- Head trauma
- Stroke or seizure
- Pain, acute or chronic
- Urinary outlet obstruction
- Alcohol or drug abuse or withdrawal
- Postoperative state
Medical Conditions: More Gradual

- Hypo- or hyperthyroidism
- Neoplasm
- Nutritional deficiency (e.g., folate, thiamine, Vitamin B12)
- Anemia
- Chronic constipation / fecal impaction
- Sensory deficits
Diagnostic Test Options

- Based on clinical suspicion and interpreted properly
- Electrolytes, BUN, glucose, creatinine
  - To identify fluid/electrolyte imbalance
- Serum osmolality, urine sodium
  - If hyponatremia is detected
- CBC with differential
  - If infection, inflammatory processes, bleeding, or anemia are suspected
Diagnostic Test Options

- Chest x-ray / Oxygen saturation (if pneumonia or pulmonary embolism are suspected)
- Urinalysis (if renal dysfunction or urinary tract infection are suspected on clinical grounds)
Diagnostic Test Options

- Cultures of urine, blood or other tissues or body fluids (if infection is suspected on clinical grounds)
- Serum medication levels, when appropriate (to identify possible medication toxicity)
- Brain CT scan or MRI with enhancement (if findings suggest stroke or other acute neurological problem)
Diagnostic Test Options

- EKG/rhythm strip (if a cardiac arrhythmia or other heart dysfunction is suspected)
- Serum Vitamin B12 level, liver function tests (to identify other metabolic abnormalities)
- TSH / free T4 / T3 (to identify possible thyroid dysfunction)
Neuroimaging: CT and MRI

- Examples where computed tomography (CT) or magnetic resonance imaging (MRI) may help include:
  - Headache or other symptoms with focal neurological findings
  - Abrupt or rapid onset of cognitive decline
  - Onset of dementia before age 65
  - Atypical clinical features
  - Gait changes or motor signs only
  - Seizures

Medications and Behavior / Altered Mental Function

- What medications can cause acute problematic behavior and altered mental function, and by what mechanisms?
Medication-Related Causes

- Medications and related effects and adverse consequences are common and important causes of many psychiatric symptoms in susceptible individuals
  - Drugs that may cause psychiatric symptoms. Medical Letter 2002; 44(1134):59-62

- Staff and practitioner, with consultant pharmacist’s input as needed, review current medication regimen for potentially problematic medications
Medication-Related Issues

- Examples of mechanisms of medication-induced problematic behavior or AMF
  - Cause oversedation
  - Affect levels of neurotransmitters in the brain
  - Disrupt fluid and electrolyte balance
  - Impair kidney, heart, intestinal, lung, and other organ function
Medication-Related Issues

- Even if medication regimen has been stable and has not caused adverse reactions in the past
- Most significant / serious medication risks—including direct and indirect effects on mental function—have been identified and documented
  - Can be anticipated
  - Adverse consequences can often be prevented or at least readily identified
Medication-Related Issues

- F329, Unnecessary Medications
  - Surveyor Guidance under the OBRA '87 regulations
  - www.cms.hhs.gov/transmittals/downloads/R22SOMA.pdf
Medication-Related Issues

- Medications with anticholinergic properties are especially problematic
  - See OBRA F329 surveyor guidance, Table 2
  - Often not essential
  - Can be readily tapered or stopped

- Other medications can affect behavior and mental states by counteracting or overstimulating brain chemicals such as serotonin
Medications and Behavior / Mental Function: Examples

- Antiarrhythmic agents
- Anticholinergic agents (and medications with anticholinergic effects, side effects)
- Antidepressants
- Anticonvulsants
- Antiemetics
- Antihistamines/decongestants
- Antihypertensive agents
Medications and Behavior / Mental Function: Examples

- Antineoplastic agents
- Anti-Parkinsons agents
- Corticosteroids
- Muscle relaxants
- Antipsychotic medications
- Opioids
- Sedatives/sleep medications
TREATMENT / MANAGEMENT
Validate Conclusions

- Establish working diagnosis and validate conclusions
- Important to base treatment choices on
  - Clear rationale
  - Understanding of overall clinical situation
- Educated guesses, based on evidence, are sometimes necessary
  - Uneducated guesses often hazardous
Treatment Principles

- Identify treatment rationale and goals
  - Before or upon initiating interventions
- Sometimes, interventions must be started quickly
  - Often, time to assess and discuss situation in detail before or soon after intervening
- Even empirical interventions should have rational basis, not just guesswork
Treatment Rationale and Goals

Key questions

- Why is patient’s behavior problematic?
- Why does behavior require an intervention
  - Why it cannot be accepted / tolerated as is
- How was likely cause determined?
  - Distinguished from other possibilities

- How will proposed interventions address causes / contributing factors?
- How will proposed interventions improve well-being and quality of life?
Treatment Rationale and Goals

- What is expected outcome; e.g., complete or partial resolution, continued decline?
- What is likely time frame for expecting some significant changes?
- What are likely side effects or complications?
Goals of Treatment and Management: Examples

- Correct underlying causes of problematic behavior
- Reduce frequency of aggressive behavior
- Stabilize mood
- Reduce undesirable medication side effects
The “ABC” Approach

- How can an “ABC” framework help in planning and providing care?
Approach to Problematic Behavior: “ABC” Framework

“A-B-C” concept

A: What are the antecedents to the behavior?

B: What is the behavior?

C: What are the consequences of the behavior?
Approach to Problematic Behavior

- Physical restraints and sedation directly address behavior (B) by disabling the individual
  - Both are undesirable in most situations
- Short of restraining or sedating, management is based on addressing
  - Antecedents (causes and contributing factors) (A)
  - Consequences (C)
Approach to Problematic Behavior

- Medical interventions—including medications—often can address underlying organic causes and contributing factors (A)
- Consequences (C) are managed primarily by
  - Addressing antecedents (A)
  - Various nonmedical interventions
Problematic Behavior Risks

- Use recognized environmental and interpersonal approaches
  - Try to prevent behavioral problems
  - Minimize escalation of such problems by implementing soon after symptoms develop
Applying “ABCs” to Care Planning

Care planning and related discussions should include:

- Known or likely causes (A)
  - For example, address pain and discomfort and minimize sleep disruption
- Identified target behaviors (B)
- Individualized goals and strategies for addressing target behavior and its causes and consequences (C)
Coordinating Approaches

- Uncoordinated activity =>
  - Unnecessary transfers
  - Improper management
  - Use of inappropriate medications
  - Control information reporting

- Limit staff seeking new telephone orders, including medications
  - Especially on evenings and weekends
  - Essential to oversee phone calling!
Interventions

- Provide symptomatic and cause-specific management
  - Usually, both types of interventions are needed simultaneously

- Symptomatic Interventions
  - Not specifically targeted to causes
  - May be less effective if used without adequately managing treatable causes
Treating Underlying Causes: Examples

- Manage delirium
  - Correct fluid, sodium imbalances
- Treat acute exacerbations of psychotic disorders
  - Appropriate medications / supportive measures
- Address contributing factors
  - Reduce excessive noise, manage other aggressive residents
Treatment

- Appropriate treatment depends on accurate diagnosis

- Address key medical conditions; for example
  - Hypo or hyperglycemia, hypercalcemia
  - Acid-base disturbances
  - Severe anemia
  - Hypoxemia / hypercapnea
  - Fever / infections

- Most of all
Address Iatrogenic Causes

Discontinue all possible offending medications
Treat Delirium and Psychosis

- Identify and treat underlying causes
- Ensure patient safety
- Support patient’s functioning
Treat Delirium and Psychosis

- Symptoms of acute psychosis unlikely to respond adequately to nonpharmacological interventions alone

- All patients with delirium and psychosis should also receive environmental and supportive interventions at least until mental function stabilizes or begins to improve
Address Wandering and Sleep Disturbances

- Wandering often of concern
- Medical and pharmacologic options to address wandering are limited
  - May be helped by addressing underlying causes; for example
    - Reduce doses of medications causing motor restlessness mistaken for agitation
    - Treat psychosis that leads a patient to wander into others’ rooms to try to find a nonexistent person
Sleep Disturbance

- Seek underlying causes
- To extent possible, use nonpharmacological measures
- Use medications for sleep disorders judiciously and to the extent possible target them to causes
- AMDA Sleep Disorders clinical practice guideline
Address Apathy and Mood Disorders

- Apathy and mood disorders may be associated with problematic behavior and apparent altered mental function.

- Apathy and other passive behaviors are most common neuropsychiatric symptom in dementia.
  - Affect over 70 percent of individuals with Alzheimer’s disease.
Address Apathy and Mood Disorders

- Apathy can be a prominent symptom of diverse causes
  - Including (but not limited to) depression
- Important to distinguish apathy (a lack of motivation in affect, behavior, and cognition) and lethargy from mood disorders
  - Anemia, heart failure, medications, etc. can cause lethargy and weakness
Address Apathy and Mood Disorders

- Apathy tends to have more symptoms related to motivation
  - Lack of interest, low energy, and psychomotor slowing, lack of emotional responsiveness, etc.

- Depression tends to relate more to mood, including dysphoria
  - Sadness, guilt feelings, self-criticism, helplessness, and hopelessness, suicidal ideation, etc.
Mood Disorders

- Careful diagnosis of depression
- Commonly used empirical approach to treatment
- If mood disorder suspected, but initiating or increasing dose of antidepressant does not at least somewhat improve symptoms, consider other diagnoses before increasing doses further or adding more medications
Using Medications Appropriately

- How do we use medications rationally to help manage acute problematic behavior and altered mental function?
Use Medications Appropriately

- Use medications appropriately to address problematic behavior and altered mental function

- Medications are commonly used
  - It is possible to use medications rationally to try to manage diverse causes of problematic behavior
  - Current use often questionable, based on uneducated guesswork
Rational Medication Use

- Rational approach based on
  - Understanding mechanisms of action
  - Targeting medications to the identified or likely underlying causes of the problem
- No “magic bullets” that routinely or predictably improve or stop behavioral symptoms
Rational and Irrational Medication Use

- Even rational medication use only sometimes successful and may be associated with significant risks and complications

- Random or irrational medication ordering and use often reflects uneducated guesswork, including misinterpretation of regulatory requirements
Random Medication Interventions

- May be problematic for several reasons
  - Inappropriate medication fails to address the problem
  - Wrong medication often causes serious adverse consequences
    - More medications added, further aggravate symptoms
  - Improperly treating underlying condition or situation often results in preventable crises and hospital transfers
Key Considerations In Using Medications

- Behavior influenced by
  - Brain’s chemical and electrical activity
  - Function of every organ system
  - Other diverse factors
Effects of Medications

- Medications for behavioral symptoms and psychiatric disorders generally affect only one or, at best, several of the many chemicals that influence brain function and behavior
FIGURE 2.3. Synapses, the key sites in the brain for converting electrical signals to chemical signals and then back into electrical signals. Reading from left to right tells the story of synaptic signaling. Joan M. K. Tycko, illustrator.
FIGURE 2.6. Schematic drawing of a glutamate receptor in the postsynaptic membrane. Glutamate binding to its receptor opens the central pore, the ion channel. Joan M. K. Tycko, illustrator.
Beyond Serotonin-Dopamine Antagonism
Example of Conventional Antipsychotics: Haloperidol
Example of Second Generation Antipsychotics: Clozapine
Effects of Medications

Examples

- Cholinesterase inhibitors affect acetylcholine levels
- Antidepressants may affect serotonin, norepinephrine, dopamine, and other neurotransmitters associated with mood

Effective medications should be part of the overall approach to the patient, but rarely are the sole solution.
Systematic Approach

- Systematic approach to medical treatment of behavioral symptoms more likely to be effective
- Obtain and review the details of the situation, including a history of the current behavior

1. Identify current behavior
2. Identify & clarify problematic behavior
3. Identify risk factors
Systematic Approach

- Determine most likely causes of the situation
  - Including current medication regimen

4. Identify the urgency of the situation
5. Identify causes
6. Review for contributing medical illness
7. Perform diagnostic tests
8. Identify contributing medications
Systematic Approach

- Identify what the staff has already done, or could do, to try to understand and address the situation
- Consider whether the patient’s behavior or condition is presenting imminent or high level of danger to self or others
  - Is urgent intervention warranted?
- Identify whether nonpharmacological approaches are feasible
Making Decisions About Treatment

- Base decisions about medications on trying to identify and understand
  - Predominant symptom(s)
  - Likely causes
  - Mechanisms of action
Agitated Behavior: Possible Causes

Possible causes

- Exacerbation of underlying psychotic disorder (e.g., depression with psychosis)
- New onset of delirium
- Adverse reaction to medications that were added recently to address similar symptoms
Example: Agitated Behavior

- Intervention possibilities
  - Needs more or less of current medications
  - Needs additional medications
  - Needs substantially or totally different approach with or without medications

- How many medications?
  - Sometimes, one medication will address root cause of multiple symptoms
  - At other times, multiple concurrent problems require multiple medications
Before Adding Medications

- Review current medication regimen including any recent changes
- Identify any medications that, either alone or in combination, could adversely affect behavior and mental function
Delirium and Psychosis

- Antipsychotic medications are approved to treat exacerbations of mental illnesses including schizophrenia.
  - Not approved to treat psychosis or behavioral symptoms in individuals with dementia or delirium.
  - Sometimes work empirically.
Delirium and Psychosis

- Medication doses may vary with:
  - Age, weight, gender, severity of distress and psychotic symptoms, and underlying causes.
  - Example: treating psychosis as an exacerbation of schizophrenia in a younger patient may require a much higher dose than treating psychosis related to dementia in an older patient.
Medications For Patients With Delirium or Psychosis

- If psychosis or delirium severe and debilitating
- Short-term oral or intramuscular second generation antipsychotic medication
  - Risperidone 0.5-1.0 mg bid
  - Olanzapine 5-10 mg/day
  - Ziprasidone 5-10 mg/day
  - Quetiapine 25-200 mg/day
  - Aripiprazole 75 mg/day
Medications For Patients With Delirium or Psychosis

- Short-term use of oral or intramuscular second generation or first-generation antipsychotic medication
- Haloperidol (e.g., 0.5-2mg q8h) also effective
  - Still used to good effect
  - Others advocate only 2\textsuperscript{nd} generation
- Still controversial whether 2\textsuperscript{nd} generation truly advantageous for short-term use
- Simple empirical test of whether pertinent
  - Do symptoms subside after administering, without causing excessive sedation?
Delirium and Psychosis

- Alternatively, judicious use of clonazepam (e.g., 0.5 – 1 mg. with a maximum of 3 mg per 24 hours) for those who are more sensitive to side effects of antipsychotic medications
  - For example, Parkinsons Disease, dementia due to Lewy body disease
Physically Aggressive Behavior

- Medications may help if they address underlying causes such as psychosis, mania, or a mood disorder.
- When repeating or increasing doses does not at least partially reduce severity and frequency of aggression:
  - May be more appropriate to stop medication and/or try something else.
Physically Aggressive Behavior

- Patients may respond to antimanic medication including antiepileptics (e.g., lamotrigine, valproic acid), clonazepam, lithium, or—when mania is associated with delusions or hallucinations—antipsychotics.
Aggression: Other Causes

- Personality disorders commonly have associated aggression
  - Do not respond readily to any category of medications
  - Nonpharmacological approaches preferable when most likely cause of physical aggression is a personality disorder (other than an obsessive-compulsive disorder)
  - Why run those with personality disorders out to the ER?
Sexually Inappropriate Behavior

- Important to distinguish variants of normal sexual expression from disease-based sexually inappropriate behavior
  - Generally undesirable to try to use medications to try to suppress normal sexual expression
  - Success of medications for sexually inappropriate behavior may depend on underlying cause (e.g., mania, psychosis)
Sexually Inappropriate Behavior

- Otherwise, try non-pharmacologic measures
  - Provide appropriate opportunities for desired nonsexual intimacy
  - Provide other outlets for sexual desires
  - Reduce barriers to more appropriate sexual expression

- For more difficult, disease-based cases
  - Get psychiatric consultation before trying medications
Behavioral and Psychological Symptoms (BPSD)

- Consider and address medical (e.g., pain, delirium), psychiatric, and environmental causes.
- Consider nonpharmacological interventions to address nonspecific behavioral and psychological symptoms related to dementia before using medications.
Classes of Medications For BPSD

- Antipsychotics
- Cholinesterase inhibitors
- N-methyl-D-aspartate–receptor modulators
- Anticonvulsants
- Antidepressants
- Anxiolytics
Medication Principles for BPSD

- No “magic bullets”
- No medication class demonstrated to have consistent, predictable benefits
- No established ways to predict who will respond or have long-term benefits
- Even apparently successful medication interventions require reevaluation
  - May need to be changed or discontinued, depending on subsequent results
One Approach to BPSD

- Choose medications based on target symptom
  - For example, address psychotic symptoms with antipsychotic medication or anxiety symptoms such as repetitive vocalizations or pacing with an antidepressant
- However, randomized, controlled trials have yet to confirm that this approach is effective
Limited Evidence of Efficacy

- As of 2008, only a few medications have randomized, controlled trials to support efficacy in treating BPSD in patients with Alzheimer’s Disease or vascular dementia.

- Some evidence for risperidone (up to 1 mg/day) and olanzapine (5 to 10 mg/day).
Limited Evidence of Efficacy

- Other second-generation antipsychotic medications include quetiapine, aripiprazole, or ziprasidone
  - Evidence of effectiveness of these options is scant
- No first generation antipsychotics have shown good evidence of effectiveness in the long-term treatment of BPSD
Alternatives

- Try memantine alone or combined with cholinesterase inhibitors
  - May be more effective in patients with dementia with Lewy bodies or related to Parkinson’s Disease
  - To date, have demonstrated a small impact on neuropsychiatric symptoms
  - Efficacy still controversial
Anticonvulsants

- Sometimes effective empirically in patients with difficult or resistant BPSD
- No controlled studies to date showing effectiveness
- Common significant side effects
  - Lamotrigene may have somewhat fewer than the others
Benzodiazepines

- Often overused and misunderstood
- Short half-life benzodiazepines (e.g., lorazepam or alprazolam)
  - Occasional minor anxiety symptoms or occasional marked agitation not handled by nonpharmacological measures
  - Tolerance occurs rapidly
- Not indicated for long-term treatment of behavioral symptoms or as a first-line agent to treat psychosis
  - Sometimes useful adjunct to other medications
Benzodiazepines

- May increase agitation, insomnia, and cause other side effects
- Clonazepam may be effective in mania and panic disorders
- All benzodiazepines associated to some degree with adverse consequences such as increased confusion, sedation, falls, and hip fractures in a susceptible population
Benzodiazepines

- Inappropriate use in patients with delirium and psychosis may
  - Permit symptoms to progress
    - Symptoms persist or worsen when sedation wears off
  - Lead to additional use of inappropriate and ineffective medications or unnecessary hospitalization
- Common “rebound” effects (anxiety, restlessness, and insomnia)
Monitoring

- What are the key aspects of monitoring patients with acute problematic behavior and altered mental function?
MONITORING
STEP 13: Monitoring

- *Monitor and adjust interventions as indicated*
- Monitor progress periodically
- Use same approaches as in Steps 1-8
- Continue to identify details of behavior and mental function
  - To permit comparison over time
Monitoring

- Document patient’s course often enough and in enough detail to enable
  - Decisions about whether symptoms are improving and interventions are effective
  - Whether diagnoses need to be reconsidered and interventions revised
- As with many symptoms, problematic behavior and altered mental function do not necessarily resolve immediately or totally
Behavioral Symptoms: Anticipated Course

- Give time for appropriate interventions to take effect
  - Impatience can lead to addition of unnecessary medications that complicate situation
- Behavioral symptoms may fluctuate or recur periodically
  - Even with optimal approach
Progress in Behavioral Symptoms

- If acute problematic behavior or altered mental function do not at least begin to stabilize or improve within 72 hours of initiating or modifying interventions:
  - Review situation
  - Consider revisiting some of previous steps
  - Reconsider diagnoses and interventions
- Change interventions more quickly when evidence suggests that they may be inappropriate or problematic
Treatment and Symptom Improvement

- Adjust doses of medications based on symptoms and adverse consequences.
- When medications are used, improvement in symptoms should roughly parallel dosage increases.
  - No matter which medications tried, low dose should be at least somewhat effective to warrant raising the dose further.
Treatment and Symptom Improvement

- If symptoms persist unchanged despite repeatedly increasing the dose
  - Medication not likely to be effective or will likely cause adverse consequences before effective dose is reached
- Only add medications appropriate for cause and nature of patient’s symptoms
- Adding medications randomly in hope something might work, usually doesn’t!
Treatment and Symptom Improvement

- If maximum recommended or tolerated dose of one medication reached with partial improvement of symptoms or improvement of one symptom but not others
  
  - Example: delusions have subsided but physical aggression remains
  
  - May be appropriate to add another medication as an adjunct or to treat other symptoms
Psychiatric Consultation

- Can help with follow-up
- Attending physician should remain involved
- Practitioner and staff should periodically reevaluate and discuss patient’s condition and risk factors
- Practitioner should also assess patient as often as indicated by stability and severity of symptoms and causes
Ongoing Monitoring

- For patient with delirium or urgent or emergency problematic behavior
  - Monitor at least several times daily until stable and/or improving
- For long-term stable (i.e., no more than occasional episodes) behavior risks
  - Staff monitor behavior at least quarterly or as frequently as indicated by patient condition and response to interventions
Recurrent or Persistent Symptoms

- Reconsider underlying diagnosis and appropriateness of current treatments
- If tapering or stopping medication results in return of symptoms that cannot otherwise be controlled
  - Medication may still be pertinent and higher dose may be needed
Recurrent or Persistent Symptoms

- If symptoms are little or no different as dose reduced
  - Additional attempted dose reduction may be indicated
- Information in F329: Unnecessary Medications surveyor guidance
  - Pertinent to review and tapering of psychopharmacologic medications
  - Important but not primary guide to appropriate action