Reducing Antipsychotic Use in Dementia

Presented by: Jordan Wagner LNHA, LPN and Anita Strong RPh, BCGP

Objectives

1. Understand the importance of reducing the use of antipsychotic medications for residents with dementia.

2. List five potential adverse effects of antipsychotic medications.

3. Discuss the evidence for efficacy of antipsychotics for managing behavioral symptoms of dementia.

4. Explain potential effects of gradual withdrawal of antipsychotics.

5. Collaboratively create a plan of care incorporating monitoring of antipsychotic therapy and management of adverse behaviors for a resident living with dementia.

KEY TAKE-AWAYS

Antipsychotics are commonly used in the elderly, particularly LTC residents, to control certain behavioral and psychological symptoms of dementia (BPSD) (e.g., delusions, hallucinations, aggression, and agitation).

Antipsychotic medications are associated with potentially severe adverse effects, including death. Older adults and individuals with dementia are at increased risk.

Antipsychotic treatment initiated for BPSD is often continued chronically, despite a lack of documented ongoing indications for many patients.

Because behavioral features of dementia change over time as the disease progresses, it is important to reassess the continued need for treatment.

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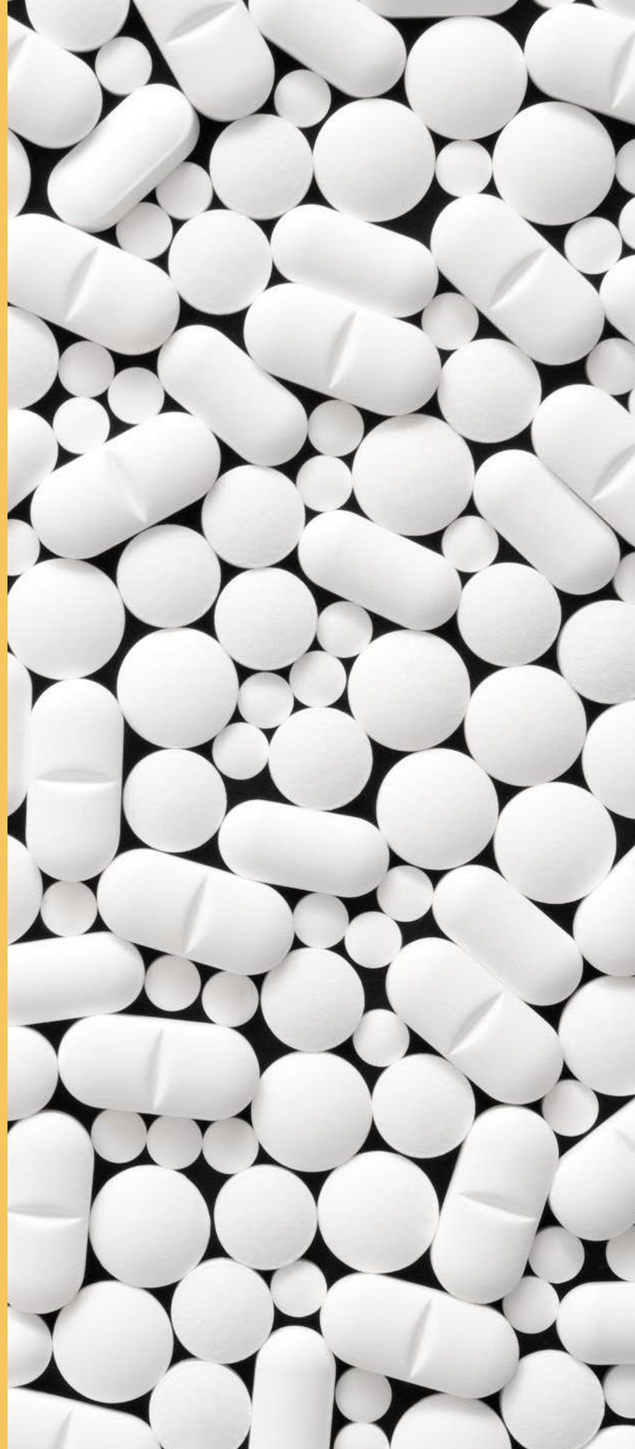
www.deprescribing.org



Target Patient Population

Residents receiving antipsychotics to manage behavioral and psychological symptoms of dementia (BPSD)

Excludes residents receiving antipsychotics for conditions including schizophrenia, bipolar disorder, and other mood disorders.

Psychotropic Medication Categories

Antipsychotics (Conventional)

Prochlorperazine (Compazine®)
Haloperidol (Haldol®)
Thioridazine
Thiothixine
Pimozide
Fluphenazine
Trifluoperazine
Chlorpromazine
Perphenazine

Antipsychotics (Atypical)

Aripiprazole (Abilify®)
Clozapine (Clozaril®)
Olanzapine (Zyprexa®)
Quetiapine (Seroquel®)
Risperidone (Risperdal®)
Ziprasidone (Geodon®)
Lurasidone (Latuda®)

Anxiolytics

Antihistamines

- Hydroxyzine (Atarax®)
- Diphenhydramine (Benadryl®)

Benzodiazepines

- Lorazepam (Ativan®)
- Alprazolam (Xanax®)
- Diazepam (Valium®)

Other

- Buspirone (Buspar®)

Psychotropic Medication Categories

Antidepressants

Escitalopram (Lexapro®)

Citalopram (Celexa®)

Fluoxetine (Prozac®)

Venlafaxine (Effexor®)

Sertraline (Zoloft®)

Mirtazapine (Remeron®)

Anticonvulsants (Mood Stabilizers)

Carbamazepine (Tegretol®)

Divalproex sodium (Depakote®)

Lamotrigine (Lamictal®)

Valproic acid (Depakene®)

Sedative/Hypnotics

Non-benzodiazepine

- Zolpidem (Ambien®)
- Zaleplon (Sonata®)
- Eszopiclone (Lunesta®)

Benzodiazepine

- Triazolam (Halcion®)
- Estazolam (Prosom®)
- Temazepam (Restoril®)

Antipsychotics by the Numbers

21%
of SNF residents receive an antipsychotic

>225,000
residents total are receiving an antipsychotic

1-9
residents in nursing homes has received a Schizophrenia Dx.

Source: Antipsychotic Drugs in Nursing Homes | U.S. News (usnews.com)

Risks & Benefits of Antipsychotic & Other Psychoactive Medications

Presented by: Jordan Wagner LNHA, LPN and Anita Strong RPh, BCGP

“An investment in knowledge always pays the best interest.” – Benjamin Franklin

Antipsychotic Adverse Effects

CV Events & Death

Antipsychotics are associated with numerous side effects, the most severe of which are increased overall risk of **death** and increased risk of **cerebrovascular events**.

While the absolute risk of some of these events is small, older adults are at higher risk of these outcomes.

Metabolic Effects

Atypical antipsychotics can cause weight gain, increase cholesterol, and worsen diabetes.

Hospitalizations

When antipsychotics are inappropriately prescribed or used for extended periods, they may contribute to polypharmacy, prescribing cascades, adverse reactions, medication errors, drug interactions, emergency department visits, and hospitalizations.

Antipsychotic Mortality in Dementia

Black Box Warning issued in 2004- Elderly with dementia-related psychosis treated with these drugs at increased risk for death compared to placebo

Consistent across all antipsychotics

"For every 100 patients with dementia treated with an antipsychotic medication, only 9 to 25 will benefit and 1 will die."

Drs Avorn, Choudhry & Fishcher

Harvard Medical School

Dr Scheurer

Medical University of South Carolina

Psychoactive Medication Adverse Effects

Risk Factors

Higher dose, older age, Parkinson’s, Lewy Body Dementia

General

Drowsiness, muscle weakness, lethargy, dizziness, falls, fractures, excessive sedation, **delirium, hallucinations,** restlessness, confusion.

Cardiovascular

Death, cardiac arrhythmias, orthostatic hypotension; CV event (e.g., stroke, TIA in individuals with dementia)

Metabolic Disturbances

Increase in total cholesterol/triglycerides, unstable blood sugar, weight gain.

Neurological

Extrapyramidal Symptoms (EPS), abnormal gate, Parkinsonism, akathisia, NMS, tardive dyskinesia, dystonia

Psychoactives Adverse Effects

30%
of pts receiving *conventional* antipsychotics die within 180 days of initiation

20%
of patients receiving *atypical* APs die within 180 days of initiation

Source: Am J Epidemiol. 2011

Consequences of Immobility

Respiratory tract infections, muscle atrophy, DVTs, pressure ulcers, depression, constipation, impaction

Anticholinergic Effects

Dry mouth, blurred vision, tachycardia, dizziness, hypertension, urinary retention, lethargy, constipation, muscle weakness, slurred speech, restlessness, confusion, delirium, hallucinations

Antipsychotic Efficacy in Dementia

Despite being widely used and believed to be efficacious, they have not been extensively studied in randomized controlled clinical trials.

Antipsychotic effect takes 3-7 days to start working. But adverse effects occur within hours. **Very sedating, so rapid responses are most likely due to sedation rather than antipsychotic effect.**

In randomized control trials, recipients with dementia who receive antipsychotics have a little bit better symptom control than the placebo group, but only for the first 3 months. The effects beyond 3 months are unclear.

Not everyone who receives antipsychotics improves. However, a large number of patients who receive the placebo improve.

Efficacy of Antipsychotics

- ✓ **Antipsychotics subdue and sedate**
- ✓ **No evidence of reducing disruptive behaviors**
- ✓ **Behaviors Not Responsive to Medication**
  - Aimless wandering
  - Inappropriate urination/defecation
  - Dressing/undressing
  - Perseveration
  - Verbal repetitions
  - Hiding/hoarding
  - Pushing others in wheelchair
  - Eating non-edibles
  - Isolation
  - Tugging at/removing restraints

Comparative Efficacy of Antipsychotics

Risperidone (Risperdal®) & aripiprazole (Abilify®)

Strongest and most consistent evidence for effectiveness for agitation and psychosis in dementia.

Olanzapine (Zyprexa®)

Moderate to high evidence for efficacy for agitation in dementia but has mixed results for psychosis. May worsen psychosis in some patients.

Quetiapine (Seroquel®)

NOT recommended as a first-line antipsychotic in dementia based on available evidence. Multiple trials have found no evidence of benefit.

Haloperidol (Haldol®)

Effective for aggression at higher doses. Not effective for other neuropsychiatric symptoms of dementia such as agitation. High risk for adverse effects.

Treatment Algorithm

for Non-emergent BPSD

(2021 Psychiatry Research)

Emergent vs Non-Emergent

If the patient or others are in imminent danger, symptoms are emergent. If the patient is not at immediate risk to himself or others, symptoms are non-emergent.

1. **Decrease anticholinergic load and optimize pain control**

↓ *Inadequate or no response*

2. **Optimize sleep, consider trazodone**

↓ *Inadequate or no response*

3. **Initiate donepezil and memantine**

↓ *Inadequate or no response*

4. **Try SSRI such as sertraline, escitalopram**

↓ *Inadequate or no response*

5. **Titrate SSRI dose**

↓ *Inadequate or no response*

6. **Try second generation antipsychotic, such as aripiprazole or risperidone**

Assessment, Management, and Monitoring

Presented by: Jordan Wagner LNHA, LPN and Anita Strong RPh, BCGP

“Tell me and I forget, teach me and I may remember, involve me and I learn” - Benjamin Franklin

Assessing Therapy

1. Understanding & Managing Neuropsychiatric Symptoms of Dementia
2. Monitoring for Adverse Drug Effects
3. Monitoring for Effectiveness of Therapy
4. Monitoring During Drug Withdrawal

Neuropsychiatric Symptoms of Dementia

Agitation	Aggression	Delusions	Hallucinations	Paranoia
Wandering	Depression	Apathy	Disinhibition	Sleep disturbances

Apathy

Expression of discomfort or low quality of life

Underlying Causes:

- Boring environment
- Pain/discomfort

Evidence-based management strategies

- Social engagement – patients in small “family-style” groups
- Decreasing noxious background noise
- Increasing lighting
- Playing relaxing music during meals
- Sharing meals with caregiving staff

Source: Charras & Fremonteir, 2010

Agitation or Aggression

Underlying Causes:

- **Medication side effects**
    1. **Anticholinergics**
    2. **Benzodiazepines**
- **Pain**
- **Delirium**
    1. **Medical illness**
    2. **Substance intoxication**
    3. **Medication toxicity**
- **Depression**
- **Sleep disorders**
- **Misperception/misunderstanding**

Most behavioral symptoms have precipitants/triggers.

Neuropsychiatric Symptoms of Dementia

- Extremely common in Alzheimer's disease (AD) and other types of dementia
  - One or more symptoms are observed in 60 to 90% of patients
  - Prevalence increases with disease severity
- New onset behaviors can arise from a variety of underlying causes. Identifying the cause of the abnormal behavior is critical to effective management. Common causes:
    - New infection
    - Medication addition, reduction, or change
    - Pain
    - Fear
    - Confusion
    - Poor sleep
    - Boredom/isolation

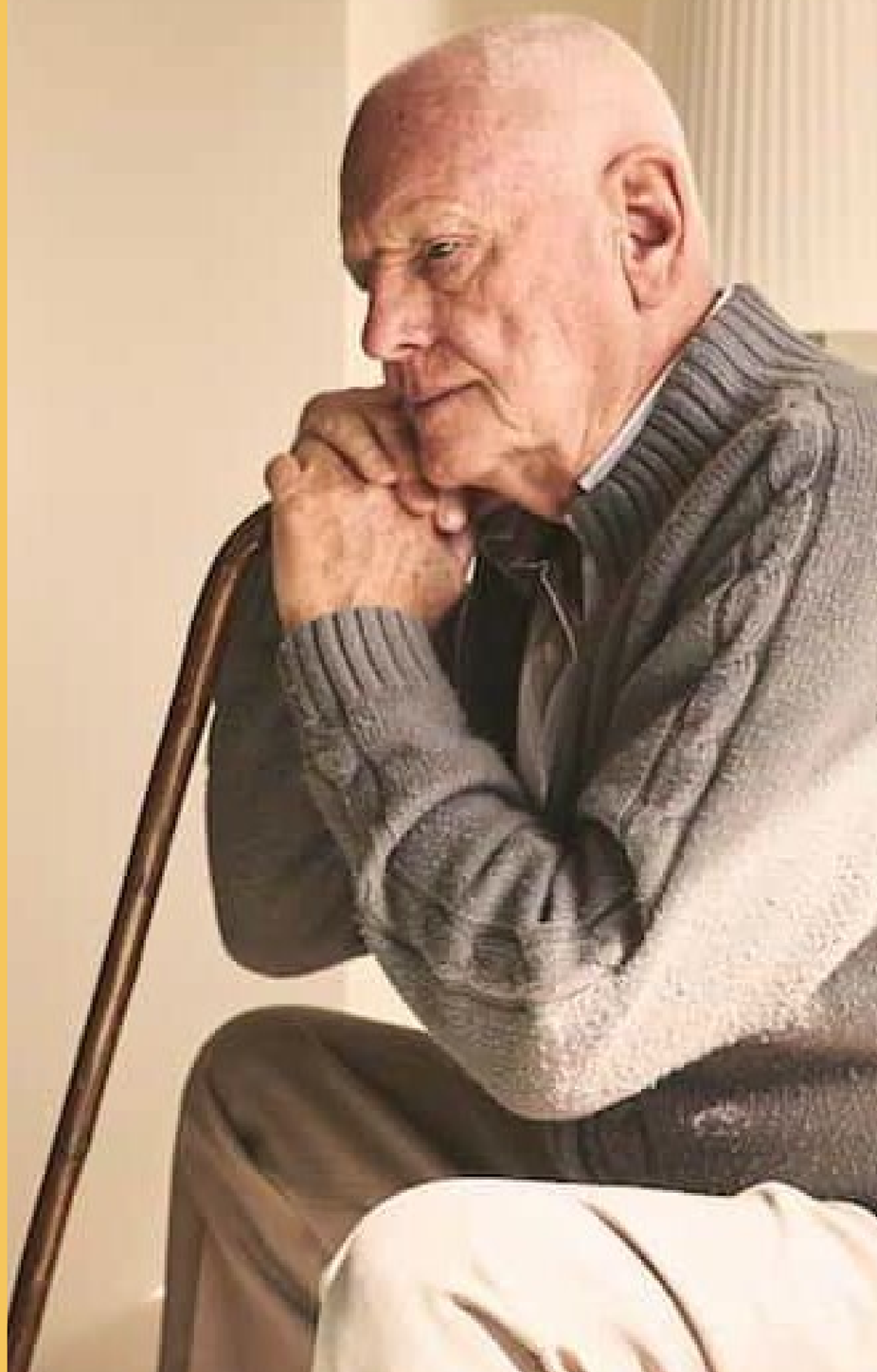
The Four A's of Dementia

Apathy
Lack of involvement/interest

Anxiety
Worry about things that cannot be controlled

Agitation
Worrisome actions that disrupt others

Aggression
Striking out or shouting at others



Symptom Management Strategies

- No single approach or medication can be expected to treat the symptoms without addressing the underlying cause
- **New or worsening symptoms should prompt assessment of safety and evaluation for an underlying cause**
- Assess Risk of Harm and Ensure Safety
- Non-pharmacological Therapies
  - Identify/avoid triggers
  - Anticipate/alleviate unmet needs
  - Address sleep-wake disturbances
  - Person-centered communication skills training for staff
  - Activities
  - Sensory interventions (e.g., massage)
- Assess for adequate pain management

Treating Neuropsychiatric Symptoms of Dementia

Step 1. Identify, Assess, and Treat Contributing Factors

- Determine and document frequency, duration, intensity, and characteristics of each problem behavior
- Identify, assess, treat, or eliminate triggers

Unmet physical need?	Unmet psychological need?	Environmental causes?	Psychiatric Causes?
• Pain • Infection/illness • Dehydration/nutrition • Sleep disturbance • Constipation • Incontinence/retention	• Loneliness • Boredom • Worry/fear • Isolation • Loss of intimacy	• Stimulation (noise/light) • Caregiver approach • Institutional routines	• Depression • Anxiety • Delirium • Psychosis

Person-Centered Care:

Universal hard-wired memories that never leave
- Music appreciation or creation
- Understanding facial expressions
- Responding to human touch (oxytocin release)
- Associations of comfort and peace (such as a fireplace, gardens and nature)
- Humor
- Personal self-expression

Patients with dementia retain critical powers of observation!

Underlying Causes of Agitation and Aggression

- **Medication side effects**
  - Anticholinergics
  - Benzodiazepines
- **Pain**
- **Delirium**
  - Medical illness
  - Substance intoxication
  - Medication toxicity
- **Depression**
- **Sleep disorders/deprivation**
- **Misperception/misunderstanding**

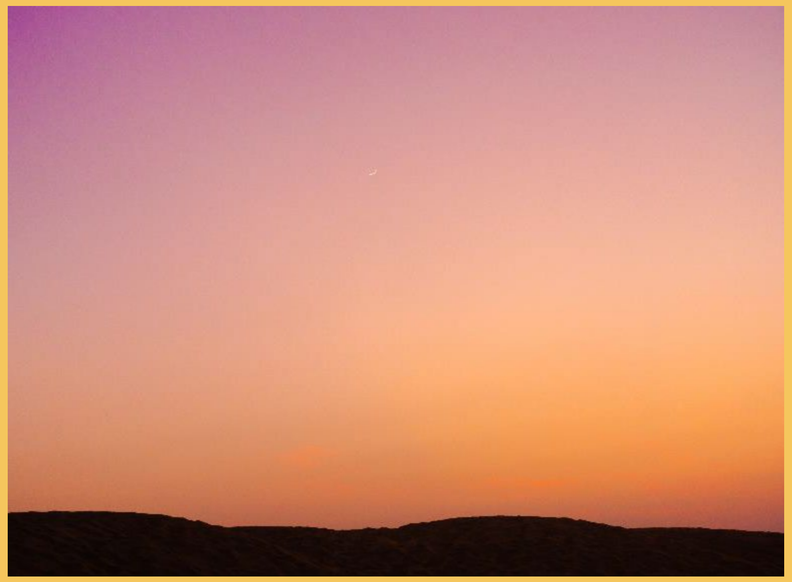
Anxiety, Agitation, Aggression, Resistance to Care

Often an expression of unmet need

Evidence-based management strategies

- Use of classical music during showers/bathing and mealtimes
- Use of patient-preferred music during bath and morning care
- Consider anxiety and agitation expressions of needs; adjust environment and routine as needed
  - Wash-up instead of bath
  - Distract with stories from past

Source: Kono, Kang & Makimoto, 2014



“Sundowning”

- Late-day confusion - behavioral disturbances that commonly peak in the late afternoon or evening
- Affects up to two-thirds of patients with dementia
- Closely related to disturbed circadian rhythms - triggers include fatigue, noise, discomfort, caregiver changes
- Risk factors include poor light exposure and disturbed sleep
    - Sleep disorders are common in dementia but may also be a manifestation of or contributor to neuropsychiatric symptoms
    - A sleep history should be regularly assessed

LTC Sleep Management Strategies

Pull up curtains during the day to obtain bright light exposure

Keep alarm noises to a minimum

Increase daytime activity and discourage daytime sleeping

Reduce number of naps (no more than 30 mins and no naps after 2pm)

Offer warm decaf drink, warm milk at night

Restrict food, caffeine, smoking before bedtime

Have the resident toilet before going to bed

Encourage regular bedtime and rising times

Avoid waking at night to provide direct care

Offer backrub, gentle massage

Hallucinations & Delusions

30%
of pts with severe Alzheimer's dementia have delusions

7% to 33%
Of pts with severe Alzheimer's dementia experience hallucinations

- Paranoid delusions can be very distressing.
- Some hallucinations and delusions are fleeting or unobtrusive and don't require aggressive treatment.
- Hallucinations are less frequent than delusions.
- Hallucinations in patients with Parkinson's disease are often drug-induced. Parkinson drug reduction may be needed if they occur.

Communication Strategies

1. Hear and respond to the resident's reality

2. Be honest/authentic. Try using "I believe it is . . . " rather than insist that your reality is concretely factual.

3. Directly address the resident. Do not discuss he/she in the third person.

4. Avoid testing the resident with questions like, "Do you remember . . . ?" Give the answers instead.

Communication Strategies

5. Divert and redirect. Avoid saying, “Don’t do that . . . “ and plan a diversion before suggesting a safer alternative.

6. Respond rather than react. If you hear the same question over and over, consider answering over and over – patiently and without judgment.

7. Be present! Remember your residents are in tune to every nuance of your mood and actions.

Severe or Refractory Symptoms

When non-pharmacological interventions and other strategies fail and symptoms result in severe distress or safety issues, **acute** pharmacological therapy with an antipsychotic may become necessary.

- Efficacy is seldom complete
- Use one drug at a time
- Start with a low dose
- Titrate slowly
- Ongoing assessment of benefits vs harms and withdrawal should be considered periodically

Monitoring for Adverse Drug Effects

Side Effect	Report to RN or prescriber if these problems occur
Movement side effects	Tremors, tight muscles, changes in walking, falls, abnormal movements like face or eye twitching, drooling, difficulty swallowing
Sedation	Sleepiness, slow to response, hard to wake up
Confusion, delirium, or cognitive decline	Worsening mental status compared to normal, worsening communication abilities, slower movements or speech, problems paying attention, agitation
Worsening psychotic symptoms (delusions/hallucinations)	Hallucinations: seeing, hearing, smelling, tasting or feeling things that aren't there Delusions: false fixed beliefs that a person holds in spite of evidence they aren't true
Orthostatic hypotension	Rapid drop in blood pressure upon standing (check orthostatic BP), dizziness, falls
Metabolic changes	Weight gain, increased appetite, hungry even after eating, high blood sugar, increased thirst, frequent urination
Urinary Symptoms/Constipation	Changes in frequency, worsened incontinence, retention, pain on urination, fewer BMs, hard stools, poor appetite, abdominal distention/pain

Antipsychotic Withdrawl

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“Tell me and I forget, teach me and I may remember, involve me and I learn” - Benjamin Franklin

Antipsychotic Reduction/Discontinuation

Behaviors change over time with or without drug treatment

Treatment should be maintained only if benefits are apparent

Treatment should be maintained only if benefits are apparent

Weigh the risk of relapse versus the risk of adverse effects from continued treatment

Evidence for discontinuing low dose antipsychotic

Withdrawal of medication show:

- No difference in outcomes between placebo and continued medication.
- About 75% remain off the drug after the trial.
- Less than 25% need to be restarted on the medication.
- Placebo group (drug withdrawal) have fewer adverse events.

Clinically Acceptable Withdrawl

- Reduce gradually
- Never more than 50% of dose q 2 weeks
- The longer the medication is prescribed, the slower the withdrawal
  - Reduction too quickly may lead to the emergence of symptoms
  - Behavioral symptoms in dementia are often temporary.
- When stable, reduce
- Reduce q 3 months
- Most patients behaviors do not worsen

Documentation & Survey Preparedness

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Documentation

For each resident receiving a psychotropic medication for neuropsychiatric symptoms of dementia, the record should reflect:

1. Indication and clinical need for psychotropic medication

- Document diagnosis and specific symptoms for monitoring
- Prior to starting new antipsychotic therapy, record must reflect evidence that multiple non-drug interventions were attempted and failed

2. Informed consent

- Resident/representative should be provided with information regarding potential adverse effects, including increased risk of death, prior to initiating antipsychotic therapy
- Residents have the right to refuse treatment

Source: 2017 CMS SOM App PP

Documentation

3. Intended duration of therapy

- Routine orders must be re-evaluated (and gradual dose reductions attempted, unless contraindicated) twice during the first year, then annually thereafter.
- PRN antipsychotics are limited to 14 days
  - New order must be written q 2 weeks
  - Documentation must reflect direct (face-to-face) evaluation and ongoing need for order
- PRN non-antipsychotic psychotropics
  - Orders must include hard stop date
  - Hospice/palliative care is not an exception to the requirement
  - Guidance does not support use of “end of life” duration; best practice is 6-month duration for hospice/end of life care

Documentation

4. Adequate monitoring for efficacy

- Document behavior problems or psychotic symptoms
  - Be as specific and objective as possible: “Agitation” is not a good description of behavior; “hitting”, “kicking” or “biting” is more specific
- Document circumstances surrounding behaviors
- Document objectively, in a way that can be measured over time

5. Adequate monitoring for and responding to adverse consequences

- AIMS assessment every 6 months
- A1C to measure blood sugar changes over time

Community-Specific Policies & Practices

On new orders for medications that hospice is providing, make notes to pharmacy in EHR:

- “Do not send, pulled from EDK”
- “Do not send; will pull from EDK, if needed”. Don’t pull medication from EDK until needed
- Helps reduce costs and waste
- Reduces the number of controlled drugs to count during change of shift counts

Summary

Psychotropic medications are commonly prescribed in residents with neuropsychiatric symptoms of dementia. These psychotropic medications are associated with potentially severe adverse effects, including death. Understanding symptoms of dementia, identifying triggers for problem behaviors,

Antipsychotic treatment initiated for neuropsychiatric symptoms is often continued chronically, despite a lack of documented ongoing indications for many patients.

Because behavioral features of dementia change over time as the disease progresses, it is important to reassess the continued need for treatment.

THANKS