

Focus 2013
Antipsychotics in Long Term
Care: Are they a need or a want
and what's the alternative?

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Objectives

1. Describe the process and considerations for initiating/selecting an antipsychotic, if all else fails
2. Describe appropriate and inappropriate indications for use of antipsychotics
3. Describe the significant drug-related adverse effects/risks of antipsychotics and cautions for use
4. Explain the who, what and why for monitoring antipsychotics
5. Explain how to discontinue antipsychotics
6. Engage the audience in thought provoking activities

Behavior management with
antipsychotics should be a
last resort

Behavioral Problems

- 40-90% of Alzheimer's patients develop at least one behavioral problem.³ Can precede a dementia diagnosis.
- Most common
 - Delusions, hallucinations (20%); 60% in LTC
 - Depressive symptoms (40%); 42% in LTC
 - Apathy
 - Agitation and aggression (80%)
 - Delirium
- Result: more rapid cognitive decline, decreased quality of life, caregiver burden, early institutionalization, increased cost of care²

1. A guide to dementia diagnosis and treatment. American Geriatrics Society
2. Kalapatapu RK et al. *Geriatrics* 2009;64(4):20-26.
3. Handcuffed. The Alzheimer's Challenging Behaviors Task Force. Dec. 2010

Medications Causing Delirium

- Pain medications
- Sleep medications
- Allergy medications (antihistamines)
- Medications for mood disorders, such as anxiety and depression
- Antipsychotics
- Parkinson's disease medications
- Drugs for treating gastrointestinal spasms and overactive bladder
- Medications for seizures
- Certain anti-infective medications

Elderly Patients with Psychosis Pose Treatment Dilemma

- [NPR News Story on Antipsychotics](http://www.npr.org/templates/story/story.php?storyId=5033873)

<http://www.npr.org/templates/story/story.php?storyId=5033873>

Antipsychotic Drugs

- Conventional
 - Rarely used because of adverse effects
 - Haloperidol still in common use
- Atypical (class of choice)
 - Risperdal, Zyprexa, Seroquel, Geodon, Abilify
(risperidone, olanzapine, quetiapine, ziprasidone, aripiprazole)
- No approved indication for dementia-related behaviors
- Prevalence of Use
 - 2004 National Nursing Home Survey: approx. 25% of residents received an antipsychotic
 - 2004 Medical Expenditure Panel Survey: approx. 1.5% (620,000) of community dwelling elderly use an antipsychotic

OSCAR / CASPER Data Psychoactive Med Use in SNFs

	Wisconsin (%)		US (%)	
	2012	2013	2012	2013
Psychoactive Meds	65.1	63.5	65.6	63.1
Antipsychotics	19.7	19	25.2	24
Anti-anxiety	21.7	21.4	22	22
Antidepressant	51.7	50.1	48.5	46.8
Hypnotics	3.6	3.4	7.6	7.2

Selecting and Using an Atypical Antipsychotic

- Appropriate environmental stressor intervention
- Discontinue or lower the dose of medications that may be contributing to the behavior
- Establish the target symptom (indication)
 - Agitation, aggression, psychosis, sundowning and sleep disturbance
- Risk/benefit assessment including comparison of non-pharmacologic interventions to medications
- Consider co-morbidities and risks
 - Drug-disease interaction
 - Adverse effects

- Determine the criteria to assess effectiveness and the frequency of monitoring
- Begin at lower doses and titrate to response
- Evaluate response after adequate trial and dose
 - Several weeks of therapy may be necessary to see full effects
- Achieve a balance between symptom control and ADRs
- Short term use is always preferred
- Antipsychotic medication use as a CMS Quality Measure (QM)
- Get/document informed consent

Avorn and Gurwitz. *Ann Intern Med.* 1995;123:195-204.

Inappropriate Targets

- Yelling out or screaming
- Wandering (unless due to hallucinations, paranoid delusions, or an agitated depression)
- Disinhibition
 - Inappropriate sexual behavior
 - Short tempered/strike out
- Repetitive behavior (unless associated with anxiety or fear)
- Restlessness
- Fidgeting
- Poor self-care
- Unsociable
- Lack of cooperation

Appropriate Targets

(Behavior poses risks to the resident or others or is severely distressed)

- Aggressive behavior
- Hallucinations
- Delusions
- Severe distress

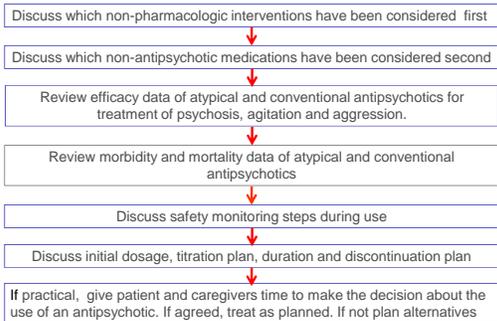
Alternatives to Antipsychotics for the Treatment of Dementia-related Agitation

- Antidementia medications
- Antidepressants
- Anti-seizure medications
- Lithium
- Anti-anxiety medications
- Pain relievers
- Beta blockers (e.g. propranolol)

Behavior Management with Cholinesterase Inhibitors and Memantine

- Behaviors showing improvement include apathy, hallucinations, aberrant motor behaviors, disinhibition, irritability, delusions, nighttime behavior, agitation, aggression, psychosis
- Statistical improvement, but the clinical relevance is unclear.
- A relevant response may lead to a dose reduction of anti-psychotic or could mitigate the need for an anti-psychotic
- Benefits may not be seen for several weeks to months

Discussing antipsychotic risk-benefit ratio with patients, caregivers



Kalapatapu and Schimming. *Geriatrics*. 2009;64(5):10-18

Efficacy and Comparative Effectiveness of Atypical Antipsychotic Medications for Off-Label Uses in Adults

- Maher, et al. A systematic review and meta-analysis in JAMA. 2011;306(12)a:1359-1369.
- Conclusions:
 - Benefits & harms vary among atypical antipsychotics
 - For behavioral symptoms, small but statistically significant benefits were observed for aripiprazole, olanzapine, and risperidone.
 - Quetiapine associated with benefits in the treatment of GAD
 - Risperidone associated with benefits in the treatment of OCD
 - ADEs were common.

Comparative Effectiveness Review on Off-Label Use of Atypical Antipsychotics

	Aripiprazole	Olanzapine	Quetiapine	Risperidone	Ziprasidone
Dementia					
Overall	++	+	+	++	0
Psychosis	+	+/-	+/-	++	0
Agitation	+	++	+/-	++	0

Strength of Evidence: ++ = moderate or high evidence of efficacy; + = low or very low evidence of efficacy; +/- = mixed results; - = low or very low evidence of inefficacy; -- = moderate or high evidence of inefficacy; 0 = no trials

Maher AR, Theodore G. *J Manag Care Pharm.* 2012;18(5-b):S3-S20.
Maglione, et al. AHRQ comparative effectiveness review, no. 43, Sept. 2011.

Group Activity

1. Form up in groups of 4 to 5
2. Select a scribe and a presenter
3. Select two behaviors that have been observed by the members of the group (1 to 2 mins)
4. Identify a non-pharmacologic management technique that has worked successfully for the behaviors (1-2 minutes)
<http://www.youtube.com/watch?v=oJa5POZHUJ>
5. List the challenges/barriers for implementing (3 to 4 minutes)
6. Regroup. Each group to present bullets 3,4,5.

The Case of Mrs. K.

Mrs. K is an 89 year old female who is currently living alone in an apartment. Her daughters have been seeking help for changes in their mother's behavior. For the past several months, she has been reporting cars running in the garage people talking in the garage, drug deals taking place in the garage and is convinced that carbon monoxide is being pumped into her apartment. She has called 911 and has approached her neighbors about all of this. Unfortunately, the cars, carbon monoxide, drug deals, etc are thought to be hallucinations and delusions. Mrs. K is convinced that all this is real and bristles when there is any suggestion that they are not. The apartment building manager has received a number of complaints about Mrs. K's behavior and has warned the family that if the complaints continue, the management will have to evict her.

Her performance on cognitive testing provides evidence of dementia. She does have a history of hypertension and is thought to have a combination of vascular and Alzheimer's Dementia. Performance on the Geriatric Depression Scale suggests mild depression. Some of this is attributed to the death of her husband about 4 months ago. The daughters give a history of anxiety that started about 10 years ago, but seemed to worsen with her husband's death.

Current medications appear to be non-contributory to the cognitive or behavioral changes. However, she is now taking clonazepam for anxiety after 10 years of lorazepam and she takes gabapentin for nocturnal leg cramps.

Mrs. K has a hearing and vision loss. She experienced a traumatic fall 3 years ago, but none since. She manages her own medications with the aid of a medication box that she fills by herself.

Medical problems include hypertension, anxiety, nocturnal leg cramps, and back pain.

All labs related to reversible causes of dementia are within normal limits. Mrs. K did experience an episode of low potassium brought on by diuretic use, but his has been resolved.

What should be done for Mrs. K?

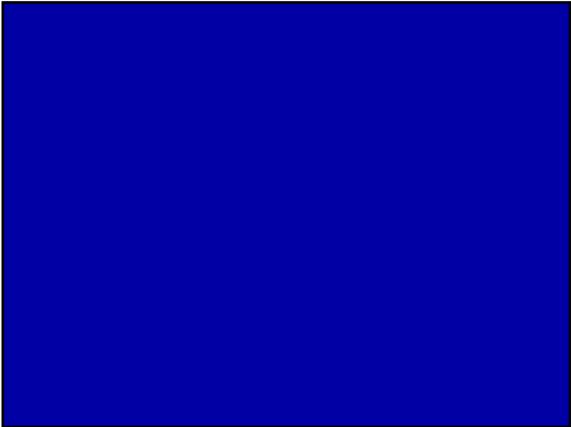
The Case of Winston

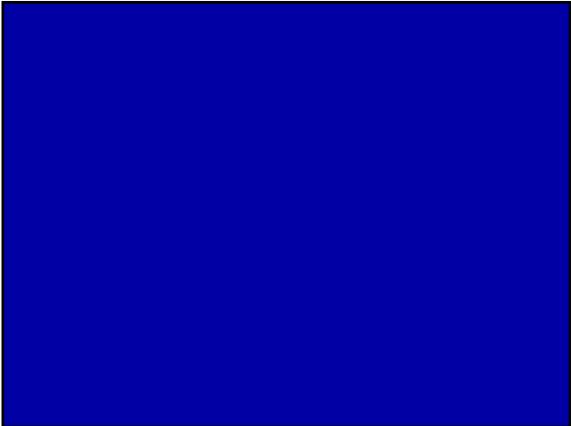
A fictional case from the National Prescribing Centre, National Health Service, U.K.

- About five years ago Winston was diagnosed with Alzheimer's disease. At his last assessment his condition was categorized by memory disorders clinic as moderate to severe. He was initiated on donepezil about two years ago, on a trial basis, but this was discontinued as it had had no apparent beneficial effects and made him feel very nauseous.
- Winston suffered a fall last year and broke his ankle. He is now very uneasy on his feet and cannot walk reliably unaided. Both his mental and physical health has deteriorated significantly since then, and he is unable to do very little for himself. He is cared for by his 80 year old wife, Ruby, who refuses to contemplate Winston going into a nursing home. She receives daily assistance from a volunteer helper (George) from a local charity - he comes each morning to help Winston get up, and once or twice a week he stays with Winston for a few hours while Ruby goes out to do some shopping and meet with some friends.

Winston has always been a mild mannered, jovial and fairly compliant character. However, over recent months he has become very withdrawn, extremely grumpy and agitated; he sometimes becomes distressed and abusive when people try to help him walk about. Occasionally, he shouts obscenities loudly, especially in the evening before going to bed, as if he was having an argument with an imaginary person in the room. George persuaded Ruby to call the LMD and ask for a home visit.

1. Are these behavioral symptoms typical of Alzheimer's disease?
2. Should the LMD prescribe an antipsychotic drug in the evening to control Winston's challenging behaviors as a first step?
3. Should Winston be referred for assessment?
4. Are there any simple things that you might advise that can be carried out in the home in the meantime?
5. When should antipsychotics be considered for Winston?
6. What are the risks and benefits of antipsychotic treatment and how might these be explained to Ruby and Winston?





Comparative Safety of Antipsychotic Medications in NH Residents

(Huybrechts KF, et al. J Am Geriatr Soc. 2012;60:420-429)

- Little variation existed between atypicals
- Comparative frequency of atypical antipsychotic use
 - Risperidone (40%), olanzapine (33%), quetiapine (23%)
- Somewhat lower CV risk with olanzapine and quetiapine
- Somewhat lower risk of bacterial infection with quetiapine
- Somewhat higher risk of hip fracture for quetiapine

Falls as a Consequence of Meds Used to Treat Mental Health Problems

Medication Class	Odds Ratio (adjusted)
Neuroleptics and Antipsychotics	1.39
Sedatives and Hypnotics	1.47
Benzodiazepines	1.41
Antidepressants	1.36

Woolcott JC, et al. Arch Intern Med. 2009;169(21): 1952-1960

Overall Risks

Steinberg M, Lyketsos CG. Atypical antipsychotic use in patients with dementia: managing safety concerns. Am J Psychiatry. 2012;169:900-906.

- Mortality risk is relatively small with short term use (1-2%)
- No evidence that alternative psychotropics (antidepressants, anticonvulsants, benzodiazepines, or conventional antipsychotics like haloperidol) are more effective or safer.
- Risk for cerebrovascular events highest during first few weeks of therapy reverting to background level after 3 months
 - Associated disease-related risk factors are diabetes, hypertension, and atrial fibrillation
- With the exception of weight gain, unlikely that metabolic consequences will result from short term use
- Risk for hip fracture greatest in first week of therapy, although continuous exposure keeps the risk high.

DHS 83

- (h) Scheduled psychotropic medications. When a psychotropic medication is prescribed for a resident, the CBRF shall do all of the following:
 - [DHS 83.37\(1\)\(h\)1](#). 1. Ensure the resident is reassessed by a pharmacist, practitioner or registered nurse, as needed, but at least quarterly for the desired responses and possible side effects of the medication. The results of the assessments shall be documented in the resident's record as required under [DHS 83.42\(1\)\(g\)](#).

MDS 3.0: Section E, Behavior

- Psychosis, yes or no
 - Symptom type and frequency
 - Impact on the resident
 - Impact on others
- Rejection of care
- Wandering
 - frequency
 - impact
- Change in symptoms

Gradual Dose Reduction (GDR), F-329

- Within first year after admitting a resident on an anti-psychotic (AP) or after starting an AP
- Attempt in 2 separate quarters with at least one month between, unless clinically contraindicated
- After first year, GDR must be attempted annually unless contraindicated
 - Symptoms worsened or returned after an attempt
 - The physician documents the clinical rationale for not attempting
- All psychopharmacological medications should be reviewed at least quarterly for continued need

Discontinuation Risks and Rewards

- Rewards
 - Decreases risk for ADEs
 - Reduces cost
 - Reduces polypharmacy
- Risks
 - Rapid discontinuation can lead to adverse drug withdrawal event
 - Physiologic withdrawal
 - Within 1-7 days of withdrawal depending on drug
 - Exacerbation of underlying disease
 - New set of symptoms
 - Increase in health care utilization
 - Number of visits
 - Length of visit

Discontinuation Syndrome

Medication/Medication Class	Withdrawal Event
Sedative/Hypnotics	Anxiety, dizziness, muscle twitches, tremor
Antidepressant (agent and class related)	Akathisia, anxiety, chills, coryza, GI distress (N,V), HA, insomnia, irritability, malaise, myalgia, recurrence of depression, vivid dreams, dizziness, paresthesia, tremor, dystonia, rhinorrhea
Antipsychotic	Dyskinesias, insomnia, nausea, restlessness
Benzodiazepines	Agitation, anxiety, confusion, delirium, insomnia, seizures
Anticonvulsant	Anxiety, depression, seizures

Adapted from Bain et al. J Am Geriatr Soc. 2008;56(10):1946-1952

How To Discontinue

- Reduce dose by 25% weekly
- May need to alter dosage form to accommodate taper
- Monitor for withdrawal symptoms
- Monitor for re-emergence of problem behavior

Monitoring-1

- Sedation
- Orthostatic hypotension
- Rigidity, tremor, akathisia, dystonia, TD (5.3%, 2 x greater with risperidone), and other symptoms characteristic of Parkinson's disease
- Weight gain, blood sugar increase, increase in blood lipids
 - Check baseline before initiating
 - Check weight monthly (weekly for first month if already overweight)
 - Check BP monthly
 - Check Blood glucose at 3 months, 6 months, then every 6 months
 - Check lipids (triglycerides) at 3 months, 6 months, then every 6 months.
- Falls
- Cognitive impairment
- Dry mouth, constipation, urinary retention, blurry vision

Muench J. Adverse effects of antipsychotic medications. Am Fam Phys. 2010;81:617-621.

Monitoring-2

- Assess for effectiveness
- Assess function for changes
- Assess for medication-related adverse effects
- Assess quality of life using appropriate criteria
- Above all, have a plan for monitoring and engage the human resources who are key to the monitoring effort (interdisciplinary team)

Assessing Cases

- What is/are the target symptom(s)?
- What is/are the symptom trigger(s)?
- What is the justification for initiating antipsychotic therapy and/or what's the alternative?
- What patient characteristics could influence the choice of antipsychotic?
- How would you monitor effectiveness?
- What will your care plan include?
