Geriatric Optimization

Antipsychotics

First Generation Antipsychotics	Second Generation Antipsychotics
Chlorpromazine (Thorazine®)	Aripiprazole (Abilify®)
Fluphenazine (Prolixin®)	Asenapine (Saphris®)
Haloperidol (Haldol®)	Brexpiprazole (Rexulti®)
Loxapine (Adasuve®, Loxitane®)	Cariprazine (Vraylar®)
Perphenazine (Trilafon®)	Clozapine (Clozaril®)
Thioridazine (Mellaril®)	Iloperidone (Fanapt®)
Thiothixene (Navane®)	Lumateperone (Caplyta®)
Trifluoperazine (Stelazine®)	Lurasidone (Latuda®)
	Olanzapine (Zyprexa®)
	Paliperidone (Invega®)
	Quetiapine (Seroquel®)
	Risperidone (Risperdal®)
	Ziprasidone (Geodon®)

WHY ARE THESE MEDICATIONS INAPPROPRIATE?

Despite the risk of harm in older adults, antipsychotics are often prescribed off-label for the treatment of insomnia and to control behavioral and psychological symptoms of dementia (BPSD).[1] Adverse events of antipsychotics include[1,2]:

- Increased risk of cerebrovascular accident (stroke)
- Falls and gate disturbances
- Syndrome of inappropriate antidiuretic hormone secretion (SIADH) or hyponatremia
- Extrapyramidal symptoms
- Metabolic effects and weight gain

Alzheimer's Disease and Dementia

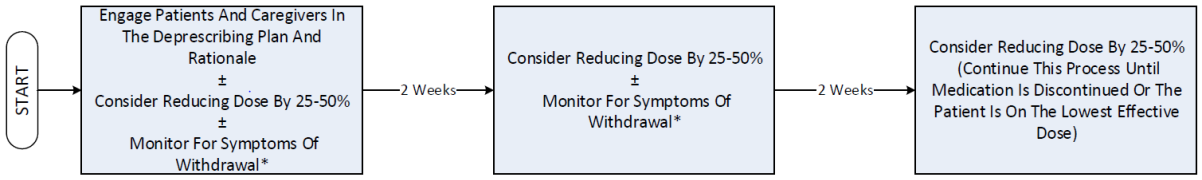
- **FDA black boxed warning:**
  - **Increased risk of death in older adults treated with antipsychotics for dementia-related psychosis**[3]
- The CATIE-AD trial results demonstrated **minimal benefit of using antipsychotics for Alzheimer's disease behaviors** and that **adverse effects offset clinical efficacy** of atypical antipsychotic drugs[4]
- Atypical antipsychotics are associated with **greater rates of decline in cognitive function** compared to placebo in patients diagnosed with Alzheimer's disease who have psychotic or aggressive behavior[5]
- A cohort study comprised of community dwelling adults diagnosed with Alzheimer's disease receiving antipsychotics showed that these medications may **increase the risk of head and traumatic brain injuries** in this patient population indicating **increased risk of falls and injury**[6]

Insomnia

- In a large cohort study of community-dwelling older adults, antipsychotics were associated with an **increased risk of all-cause mortality in patients with and without dementia** and without preexisting serious mental illness[7]
- There is a **lack of clinical evidence** that supports the efficacy of antipsychotic use in insomnia and prescribing these medications inappropriately contribute to polypharmacy which can lead to an increased risk of adverse effects, drug-drug interactions, emergency department visits, and hospitalizations[1]

APPROACH TO OPTIMIZATION[1]

- Evaluate the reason for initiating antipsychotic therapy through chart review and discussion with the patient, caregivers, and other health care professionals
- Deprescribing should be considered for older adults who have been treated with antipsychotics for:
  - Insomnia
  - BPSD for at least 3 months and have symptoms that are controlled or who have not responded to therapy
- Older adults prescribed antipsychotic therapy for psychiatric indications (i.e., schizophrenia, bipolar disorder, etc.) may be clinically appropriate for continued antipsychotic therapy and a psychiatrist should be consulted if deprescribing is considered



- Tapering may not be needed for low dose antipsychotics prescribed for insomnia only
- In patients with severe baseline BPSD symptoms or long-standing antipsychotic use, slower tapering may be appropriate
- Consider available tablet sizes when decreasing doses for ease of patient administration
- While deprescribing monitor for psychosis, aggression, agitation, delusions, and hallucinations in patients prescribed antipsychotics for BPSD

Symbol Key

*Nausea and vomiting, diarrhea, abdominal pain, headache, tachycardia, vertigo, increased perspiration, restlessness, anxiety, insomnia, myalgia, and hyperkinesia[8]

GOAL: Full discontinuation OR adjusting regimen to lowest effective dose

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ADDITIONAL BEST PRACTICES

Behavioral and Psychological Sympyoms of Dementia (BPSD)[1]

- If BPSD relapses, consider nonpharmacological approaches such as behavioral therapy and management strategies (i.e. relaxation, social contact, music or aroma therapy, structured activities)
- Review and address other conditions (i.e. depression, pain, etc.) and/or medications that might be worsening symptoms
- Consider environmental causes that may effect symptoms such as light and noise
- If patients relapse and nonpharmacological approaches are not effective, restart antipsychotic therapy at the lowest effective dose and re-trial deprescribing in 3 months- at least two attempts to stop antipsychotic therapy should be made

Insomnia

- Sleep hygiene eduction
- Cognitive behavioral therapy
- Melatonin (0.3-2 mg orally 1 hour before bedtime)[9]

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