Gradual Dose Reduction of Psychotherapeutic Medications in Patients with BPSD

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Jenna D. Toniatti, PharmD
Objectives

- Define BPSD and review the spectrum of associated symptoms
- Review pharmacologic and non-pharmacologic treatments for BPSD
- Evaluate the risks associated with antipsychotic use in BPSD and determine when use is appropriate
- Discuss approaches and challenges associated with gradual dose reduction
- Review considerations for choosing an appropriate antipsychotic for use in the BPSD patient
2011: OIG reports that 14% of elderly NH residents are being treated with atypical antipsychotics & 83% of claims were for off-label indications (including BPSD)

March 2012: CMS launches initiative to decrease off-label use of antipsychotics in NH pts by 15% by Dec 2013: GOAL MET

New target: reduce use by 25% by end of 2015 and 30% by 2016
Definition: distressing non-cognitive symptoms which manifest during the moderate and late stages of dementia, including agitation, aggression, psychosis, and mood disorders
<table>
<thead>
<tr>
<th>Spectrum of Symptoms</th>
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<tbody>
<tr>
<td>Aggression</td>
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<tr>
<td>Restlessness</td>
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<tr>
<td>Apathy</td>
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<tr>
<td>Defiance</td>
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<tr>
<td>Cursing/swearing</td>
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<tr>
<td>Shadowing</td>
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<tr>
<td>Wandering</td>
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<tr>
<td>Psychosis (hallucinations/delusions)</td>
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<tr>
<td>Agitation</td>
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<tr>
<td>Screaming</td>
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<tr>
<td>Hostility</td>
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<tr>
<td>Repetitive behaviors</td>
</tr>
<tr>
<td>Sleep disturbances</td>
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<tr>
<td>Sun downing</td>
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<tr>
<td>Emotional lability</td>
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</table>
Emergent vs. Non-emergent BPSD

- **Emergent BPSD**: pt in severe distress, poses imminent danger to self or caregivers, or has severely disruptive/dangerous behavioral disturbances

- **Non-emergent BPSD**: behavior which is bothersome or inconvenient to self or others, disrupts daily functioning, and/or erodes quality of life, but is not severe enough to pose a threat to self or others
Evaluating BPSD Symptoms

New onset BPSD symptoms should always be assessed to determine if there is an underlying, reversible cause that needs to be addressed.

- **Environmental factors**
  - Temperature, noise, lighting, sensory deficits, physical barriers, visual barriers

- **Physiological factors**
  - Infection, pain, thirst/hunger, constipation, nocturia, sleep disturbances, hypoxia

- **Psychological factors**
  - Emotional stress, depression, boredom, anxiety

- **Medication side effects**
  - Anticholinergics, benzodiazepines

- **Cognitive Impairment**
  - Lack of understanding (agnosia), inability to communicate perceptions/expectations
# Non-pharmacologic management of BPSD

Should generally be attempted first, especially for non-emergent BPSD

<table>
<thead>
<tr>
<th>Behavior modification</th>
<th>Scheduled toileting</th>
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<tbody>
<tr>
<td>Prompted voiding</td>
<td>Walking/light exercise</td>
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<tr>
<td>Graded assistance</td>
<td>Positive reinforcement</td>
</tr>
<tr>
<td>Music</td>
<td>Pet therapy</td>
</tr>
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Antipsychotics may be considered for emergent BPSD or for non-emergent BPSD which does not respond to other therapies.
Evaluating Appropriate use of Antipsychotics in BPSD

- No antipsychotic medications are FDA approved for treating BPSD symptoms
- Black Box warnings against increased mortality in elderly patients with dementia-related psychosis
- Cardiovascular risks
- EPS symptoms
- CNS effects
Use of antipsychotic medications for BPSD may be deemed appropriate when use includes:

- An appropriate indication for use
- A specific and documented goal of therapy
- Ongoing monitoring of the pt to evaluate effectiveness and the development of adverse effects
- Use of the medication for the shortest duration possible at the lowest effective dose
CMS Guidelines

- For patients who are not currently on antipsychotic medications, therapy should not be initiated unless indicated for a specific condition as diagnosed and documented in the patient record.

- Patients who are maintained on antipsychotic drugs should receive gradual dose reductions and behavioral interventions in an attempt to discontinue use, unless contraindicated.
Contraindications to dose reduction include:

- diagnosis of schizophrenia
- diagnosis of bipolar disorder
- patients who have tried and failed a previous attempt at GDR
Physician Challenges

- Antipsychotics have multiple side effects
- Excess mortality
- Drug-drug interactions
- Family resistance
- Facility resistance to change
- CMS regulatory issues
- Liability, lawsuits
Non-pharmacologic management of BPSD

- Explore the alternatives to antipsychotics
- Utilize IDT to help identify strategies to manage BPSD
- Evidence based medicine does support many non-pharmacological approaches
BPSD Antipsychotic Prescribing Considerations

Consider:

- Indications for use
- Dosage Duration
- Monitoring for effectiveness and adverse events
• Involve the IDT:
  • Inform the IDT of GDRs to observe for symptoms and help document changes noted
  • Ask your team to carefully document their findings
  • Documentation is key for contraindications or worsened symptoms
Documentation and Liability

- **Informed consent**: critical to obtain from a patient or caregiver documenting that they understand the benefits and risks of antipsychotic use.
- **LTC facilities** require a monthly review for patients on antipsychotics and a quarterly review for patients receiving other psychotherapeutics.
- **Each review requires documentation** such as PHQ-9 scores, BIMS scores, attempted non-pharm interventions, behavioral trends, clinical concerns, ADE monitoring, patient involvement, etc.
CMS Strategies for reducing liability

- Within the first year of prescribing an antipsychotic, attempt GDR in two separate quarters (unless contraindicated) and annually after the first year

- GDR is considered contraindicated if symptoms worsen or return after a GDR attempt
  - Must document why another GDR attempt is unreasonable

- Attempt non-pharmacologic behavior strategies first
GDR Considerations

- While discussing the benefit/burden with pt or family, discuss the plan for GDR when appropriate and that a consideration for GDR will be performed.

- At each assessment review the least dose possible for the best effect.

- Note that even the smallest GDR is still considered a GDR, if this is successful it is recommended to continue to GDR.
Approaches to GDR

• **Dosages should be titrated down slowly**
  - Target dose should be met within 4 to 6 weeks

• **Patient must be monitored**
  - Symptom recurrence
  - ADWE (adverse drug withdraw events)

• **Titrate one medication at a time, not multiple medications at once**
Challenges to GDR

- Patient, family, and/or caregiver resistance
- Physician resistance
- Medication-related challenges
  - ADWE: antipsychotic withdraw symptoms include dyskinesias, insomnia, nausea, restlessness
  - Pharmacokinetics and receptor affinity
# Dopamine receptor affinity

<table>
<thead>
<tr>
<th>DRUG</th>
<th>DOSE/D₂ OCCUPANCY</th>
<th>DOSE/D₂ OCCUPANCY</th>
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<tbody>
<tr>
<td>CLOZAPINE</td>
<td>125mg / 20%</td>
<td>600mg / 67%</td>
</tr>
<tr>
<td>RISPERIDONE</td>
<td>2mg / 66%</td>
<td>4mg / 73%</td>
</tr>
<tr>
<td>OLANZAPINE</td>
<td>5mg / 55%</td>
<td>10mg / 73%</td>
</tr>
<tr>
<td>QUETIAPINE</td>
<td>150mg / 58% (2hr after dose)</td>
<td>600mg / 64% (2hr after dose)</td>
</tr>
<tr>
<td>ZIPRASIDONE</td>
<td>40mg / 10%</td>
<td>160mg / 73%</td>
</tr>
<tr>
<td>ARIPIPRAZOLE</td>
<td>0.5mg / &lt;40%</td>
<td>30mg / &gt;90%</td>
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Choosing an Appropriate Antipsychotic

- **Conventional antipsychotics**
  - Haloperidol, thioridazine, and chlorpromazine have shown modest improvement in BPSD

- **Atypical antipsychotics**
  - Risperidone is the only agent with strong evidence of efficacy for overall BPSD, agitation, and psychosis
  - Aripiprazole has strong evidence of efficacy for overall BPSD
  - Olanzapine has evidence of improving agitation, but overall lower evidence of efficacy
  - Quetiapine - lack of evidence - not recommended unless other agents have failed
Choosing an Appropriate Antipsychotic *cont.*

<table>
<thead>
<tr>
<th>DRUG</th>
<th>Weight</th>
<th>DM</th>
<th>Dyslipidemia</th>
<th>QT</th>
<th>SB</th>
<th>ACB</th>
<th>EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aripiprazole</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Yes</td>
<td>Moderate</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Risperidone</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low</td>
<td>Yes</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Yes</td>
<td>Moderate</td>
<td>High</td>
<td>Low</td>
</tr>
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Take Home Points

- Use of antipsychotic medications in the treatment of BPSD requires a valid indication, documented goal of therapy, frequent patient monitoring, and use of the lowest doses for the shortest duration possible.

- GDR should be attempted, unless contraindicated, for all patients receiving antipsychotics for BPSD, and non-pharmacological interventions tried.
Take Home Points

- Doses reductions should occur in modest increments over adequate periods of time to minimize ADWEs and to monitor symptom recurrence.

- If antipsychotic use is warranted, risk vs. benefit should be weighed for the individual patient based on their unique set of symptoms and other comorbidities.


Questions?