

Geriatric Psychiatry for Non-Psychiatrists

November 4, 2023

Managing Agitated Behaviors in Dementia

Allan A. Anderson, MD, MMM, DLFAPA

Director, Banner Alzheimer's Institute in Tucson

Clinical Assistant Professor, University of Arizona

DISCLOSURES

- I have no disclosures regarding any conflicts regarding the content of this presentation
- I will be discussing “off-label” use of pharmacologic agents as to date few medications have been FDA approved to treat agitation in Alzheimer’s disease or other dementias.

Agitation in Alzheimer's Disease

Seen in up to 80-90% of dementia patients

Untreated, often leads to more rapid decline

Leading cause of caregiver burnout

Leading cause of ED visits, hospitalizations, and institutionalization

Neuropsychiatric symptoms of dementia

Delusions

Hallucinations

Depression

Anxiety

Euphoria

Aggression

Apathy

Irritability

Disinhibition

Wandering or pacing

Sleep disturbances

Understanding Behaviors

- Often signal an unmet need
- Represent a form of communication
- Typically, are not volitional, but interpreted so
- Often worsen as the day progresses
- Often have a trigger

Once triggers are identified, can be anticipated, eliminated or modified
Behaviors prevented or manageable leading to improved quality of life

Typical Behavioral Triggers

Communication

Communication

Communication

What too often occurs





What we strive for



5-D's

Describe

Decode

Devise

Do

Determine

DICE

Describe

Investigate

Create

Evaluate

If it works – Broadcast it

Use The **DICE** Approach



Describe

Investigate

Create

Evaluate

- Caregiver **describes** problematic behavior
 - Context (who, what, when and where)
 - Social and physical environment
 - Patient perspective
 - Degree of distress to patient and caregiver
- Provider **investigates** possible causes of problem behavior
 - Patient
 - Medication side effects
 - Pain
 - Functional limitations
 - Medical conditions
 - Psychiatric comorbidity
 - Severity of cognitive impairment, executive dysfunction
 - Poor sleep hygiene
 - Sensory changes
 - Fear, sense of loss of control, boredom
 - Caregiver effects/expectations
 - Social and physical environment
 - Cultural factors
- Provider, caregiver and team **collaborate to create** and implement treatment plan
 - Respond to physical problems
 - Strategize behavioral interventions
 - Providing caregiver education and support
 - Enhancing communication with the patient
 - Creating meaningful activities for the patient
 - Simplifying tasks
 - Ensuring the environment is safe
 - Increasing or decreasing stimulation in the environment
- Provider **evaluates** whether “CREATE” interventions have been implemented by caregiver and are safe and effective

Consideration of Psychotropic Use (Acuity/Safety)

←

←

←

Study of Use of DICE

Participants (N=136) in both in-person and online DICE trainings experienced significant changes in knowledge, self-efficacy and attitudes from baseline to post-training assessments ($p < .01$)

By using the DICE approach with caregivers of persons with dementia, Wisconsin's DCSs and other dementia professionals are uniquely positioned to help reduce risks associated with BPSD, including the use of psychotropic medications.

Training satisfaction was high, knowledge about BPSD increased, and attitudes improved. The DICE trainings prepared trainees to implement this intervention with 165 family caregivers.

PULSE-D

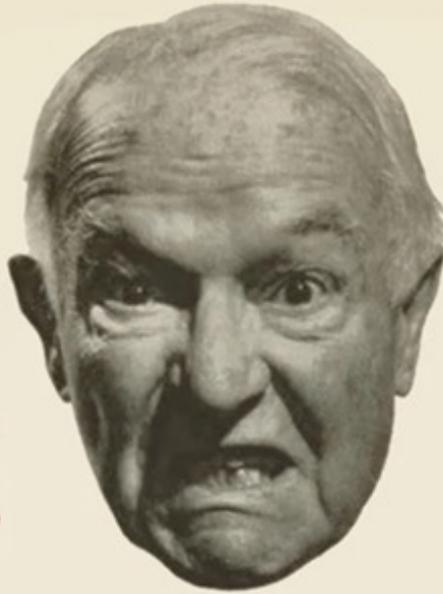
- **P** – Pain/Physical distress
- **U** – UTI, other infection, other acute medical problem
- **L** – Light
- **S** – Sleep + Stress (Caregiver stress in particular)
- **E** – Environment

- **D** – Effects of medications and supplements

Also, ask about possible lifelong psychiatric disease

**When Nonpharmacologic
treatments fail,**

What do we do next?



*Tyrant
in the
house?*

"Thorazine" can control the agitated, belligerent senile.

and help the patient to live a composed and useful life.

When "Thorazine" is administered to the agitated senile, there is a marked decrease in his nerve-racking outbursts of hostility, irritability, abusiveness, incessant talking and "day-and-night" pacing and restlessness.

On "Thorazine" therapy, the patient often forms more regular eating and sleeping habits and improves in his personal hygiene. As the patient becomes more tractable and cooperative, he is able to live a composed and useful life.

THORAZINE*
chlorpromazine, S. K.F.

2 "Tyrant in the house?" *of the fundamental drugs in medicine.*

Smith Kline & French Laboratories, Philadelphia

*U.S. Reg. U.S. Pat. Off.

for prompt control of
senile agitation



THORAZINE*
chlorpromazine, S. K.F.

"Thorazine" can control the agitated, belligerent senile and help the patient to live a composed and useful life.

 Smith Kline & French Laboratories

*U.S. Reg. U.S. Pat. Off.

Algorithm for Treatment of Neuropsychiatric Symptoms of Dementia

- Harvard Algorithm
- International Psychiatric Association
- Geriatric Society of America

All have suggested treatments that have some, often limited, scientific evidence of benefit

Harvard Algorithm

- **Emergent BPSD** (Oral medication not feasible)
- Try intramuscular injection of olanzapine
- No or inadequate response – Try IM injection of haloperidol
- No or inadequate response – Try IM benzos for short-term

Chen A, Copeli F, Metzger E et al. The Psychopharmacology Algorithm Project at the Harvard SouthShore Program: An update on management of behavioral and psychological symptoms in dementia. *Psychiatry Research* 295(2021): 11:1-9

Harvard Algorithm

• Urgent BPSD

- If not recently on D2 receptor blockade try aripiprazole to max dose of 15 mg
- If no or inadequate response – try risperidone increasing to a max dose of 2 mg
- If no or inadequate response – try prazosin with a maximum dose of 2 mg qAM and 4 mg qPM
- If no or inadequate response – consider ECT

Harvard Algorithm

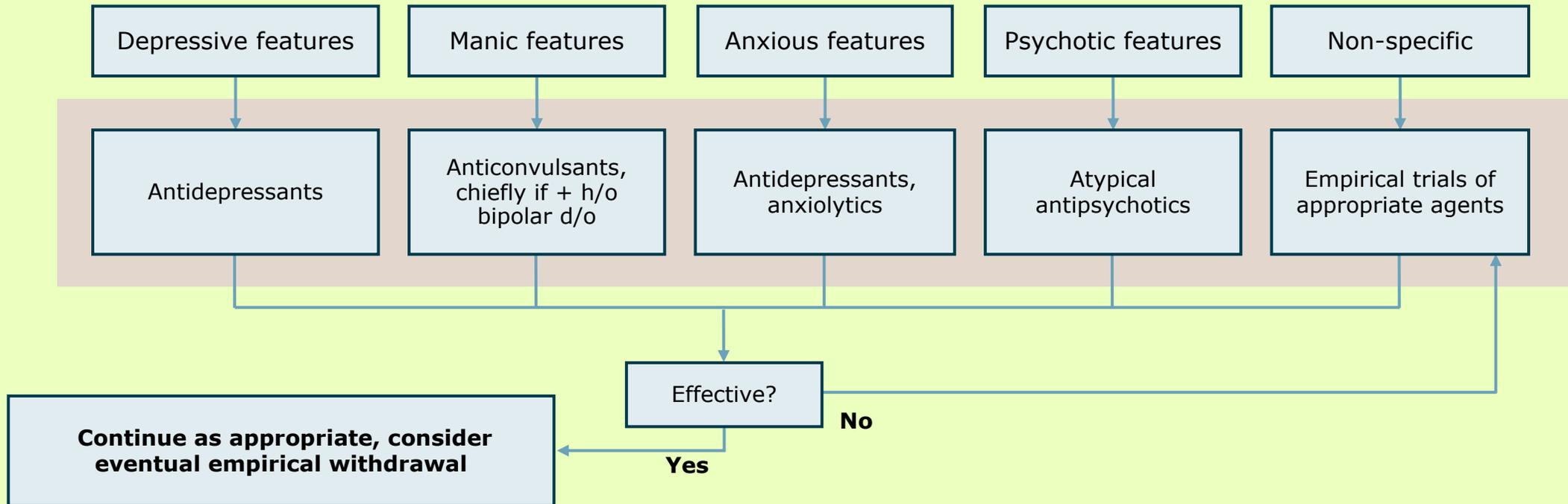
- **Non-emergent BPSD**
- Decrease anti-cholinergic load and optimize pain control
- If inadequate or no response - consider sleep optimization with trazadone
- If inadequate or no response – initiate donepezil and memantine
- If inadequate response do not d/c donepezil or memantine, try an SSRI either escitalopram or sertraline

Harvard Algorithm

- **Non-emergent BPSD (cont'd)**
- If inadequate or no response – try 2nd generation antipsychotic
- If inadequate or no response – try prazosin (max dose 2mg AM 4mg PM)
- If inadequate or no response – try carbamazepine (max dose of 400 mg)
- If inadequate or no response – try unilateral or bilateral ECT

Psychobehavioral Metaphors

Pharmacological management of agitation in dementia, following unsuccessful non-pharmacological intervention



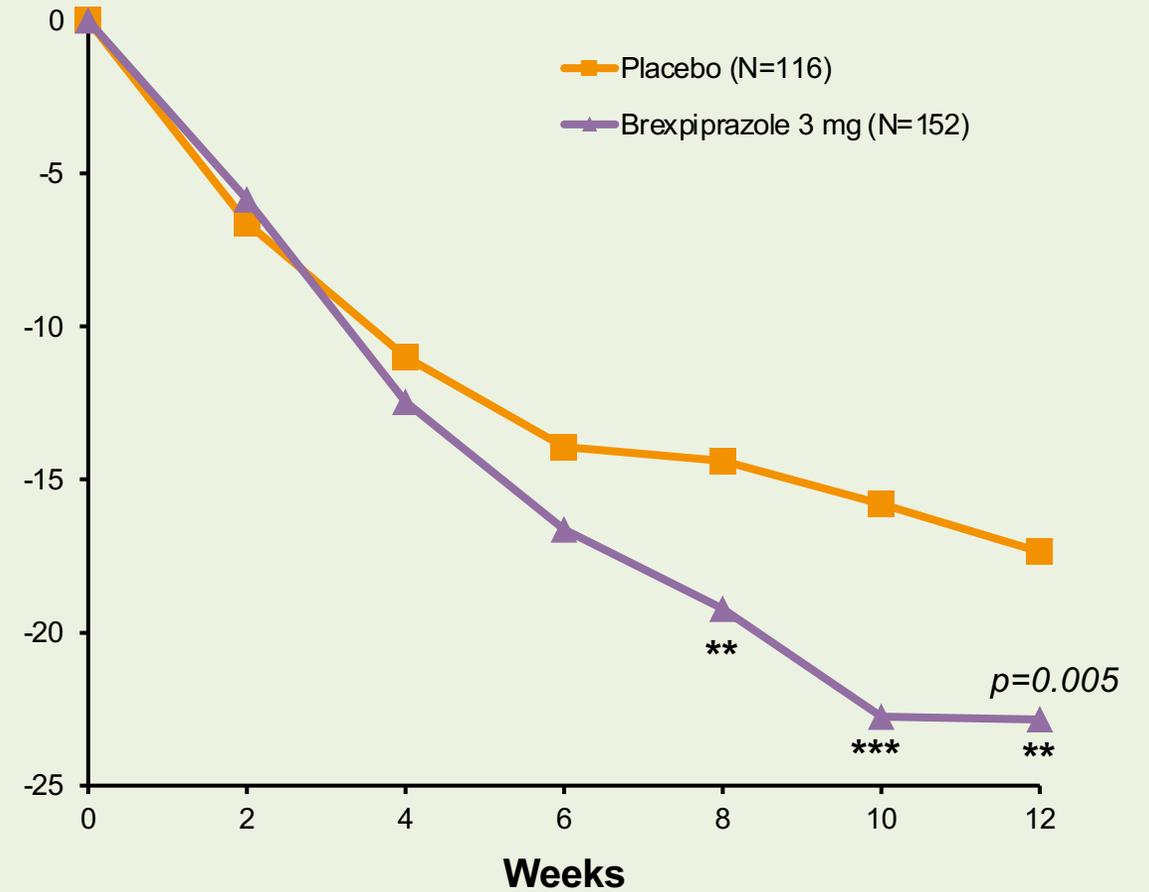
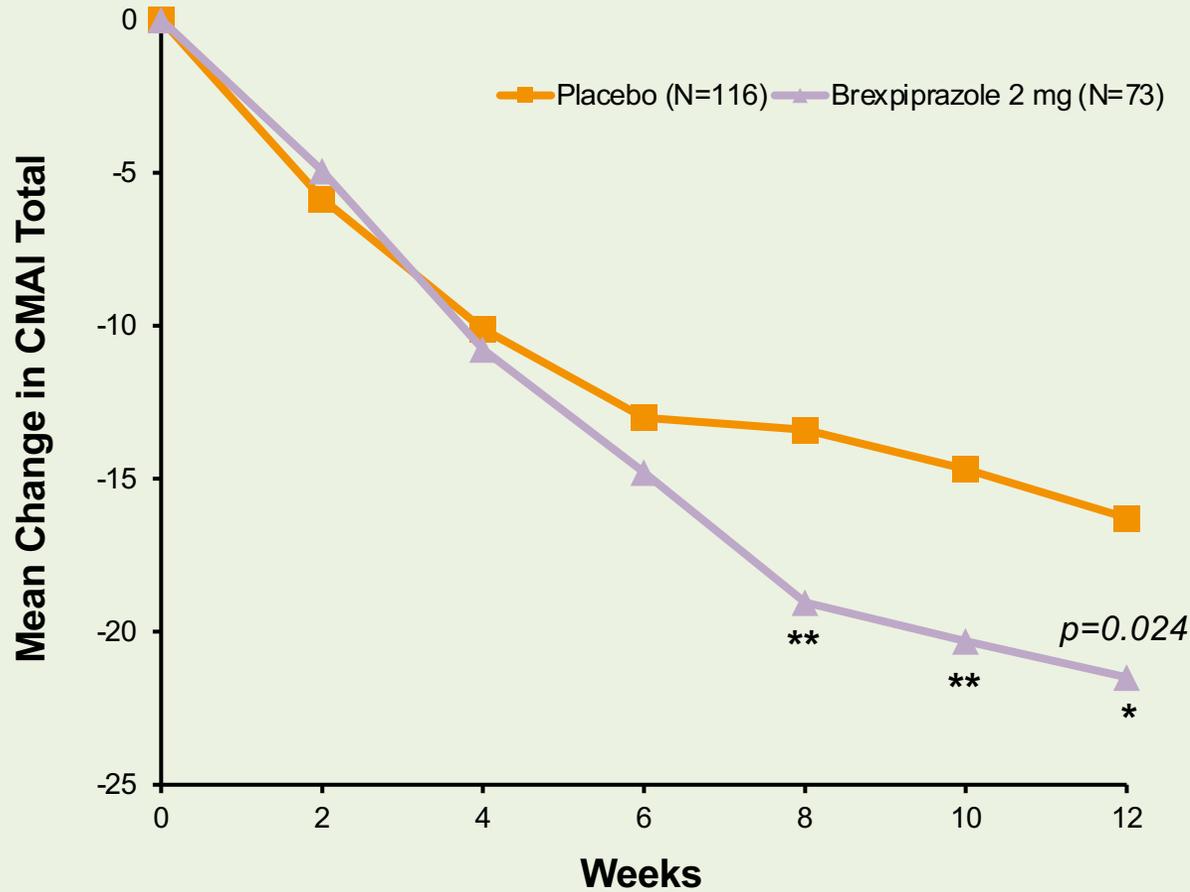
Brexpiprazole

**A POTENT ANTAGONIST OF SEROTONIN 2A
RECEPTORS, NORADRENERGIC ALPHA 1 B & 2C
RECEPTORS**

**FDA-APPROVED FOR ADJUNCTIVE TREATMENT OF
MAJOR DEPRESSION AND FOR TREATMENT OF
SCHIZOPHRENIA**

Courtesy of Dr. George Grossberg

Primary Endpoint: Change from Baseline in CMAI Total by Dose (MMRM) (Study 331-14-213)

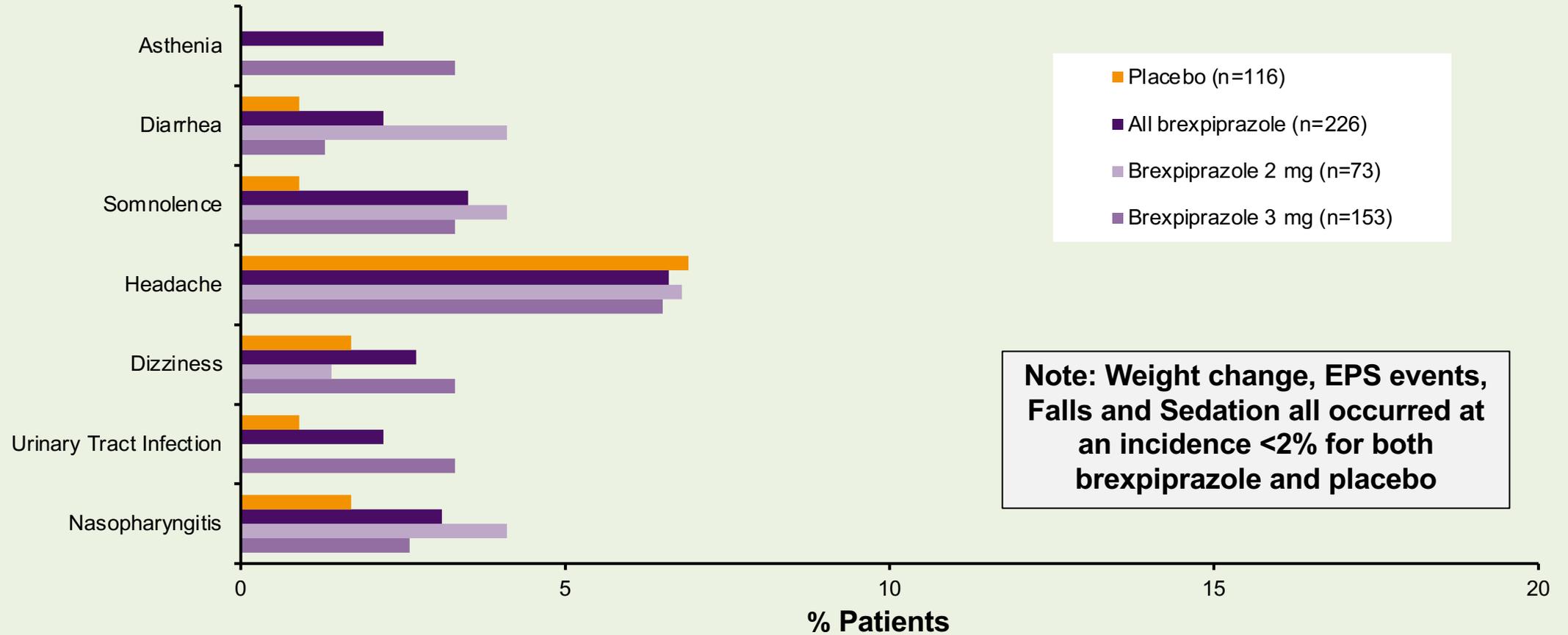


Baseline CMAI Total score: placebo, 79.17, n=116; brexpiprazole 2 mg, 79.07, n=73; brexpiprazole 3 mg, 81.26, n=152

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

CMAI=Cohen-Mansfield Agitation Inventory; MMRM=mixed model for repeated measures

Most Common AEs (Study 331-14-213) (≥2% in the placebo or all brexpiprazole group)



Courtesy of Dr. George Grossberg

Dosing

Days 1–7: 0.5 mg

Day 8–14: 1 mg

Day 15: Begin 2 mg dose

Can increase dose to 3 mg

***Important – Not a prn medication**

Special issues

- **Disrupted sleep** – Avoid Benzos, Z-drugs. Alternatively use trazadone, mirtazapine, melatonin, suvorexant, consider light therapy
- **Apathy** – Cholinesterase inhibitors, memantine, methylphenidate, other stimulants, bupropion
- **Psychosis in PD and PDD** – Cholinesterase inhibitors, pimavanserin, quetiapine, clozapine, judicious use of low doses of risperidone
- **FTD** – No specific medications with evidence of benefit, no evidence of benefit for cholinesterase inhibitors, negative study of memantine, SSRI medications may be helpful, prudent use of atypical APs
- **Pseudobulbar affect (PBA)** – Use of combo of dextromethorphan and quinidine

Thank you

Questions?



Allan.Anderson@bannerhealth.com

Additional Slides

Due to the limited time of the presentation, I have included some additional slides that describe various non-pharmacologic strategies.

The following slides are for your review

Non-Pharmacological Approaches

- **Evaluate the environment**

- Changes in setting, caregiver, or roommates
- “The demented patient’s agitation may have more to do with the nursing home roommate than with dopamine or other receptors in the brain”
- Provide an environment that avoids conflicts (eg, wandering, vocalizing, sexual disinhibition)
- Make sure it is not too hot/cold/noisy/dark

Non-Pharmacological Approaches

- **Keep consistent routines**
 - Structured activities
 - Regular schedule, avoid boredom or overstimulation
 - Watch out for those holiday decorations!
- **Employ simple behavioral therapy techniques**
 - Distraction/redirection/extinction
 - “She can’t resist if you don’t insist”

Non-Pharmacological Approaches

- **Train caregivers on communication techniques**
 - Speak slowly and clearly, use normal tone of voice
 - Allow lip-reading
 - Maintain eye contact
 - Allow comfortable space

Non-Pharmacological Approaches

- **Train caregivers on communication techniques**
 - Meet them in whatever time and place they are
 - Don't over-explain
 - Validate concerns/feelings
 - Reassure them that they are safe and loved
 - Avoid critical remarks

Non-Pharmacological Approaches

- **Caregiver interventions**
 - Teach that agitation is not volitional
“It’s the disease talking”
 - Supportive psychotherapy for caregiver
 - Referral to day treatment program
 - Exercise (for the caregiver)
 - Respite care

AdditionalReferences

- Hershey L and Coleman-Jackson R. Pharmacologic Management of Dementia with Lewy Bodies. *Drugs & Aging* (2019) 36:309-319
- Tampi RR and Jeste DV. Dementia is more than memory loss: Neuropsychiatric Symptoms of Dementia and Their Nonpharmacologic and Pharmacologic Management. *Am J Psychiatry* 2022; 179:528-543
- Chen A, Metzger E, and Osser D. Improving Pharmacologic Management of Behavioral and Psychological Symptoms of Dementia: An Algorithm for Real-World Care. *Am J Geriatric Psychiatry* 2022; 30: Issue 4 Supplement
- Martini de Oliverira A et al. Nonpharmacological Interventions to Reduce Behavioral and Psychological Symptoms of Dementia: A Systematic Review. *Biomed Research International*. Volume 2015, Article ID 218980: 1-9
- Brodaty H and Arasaratnam C. Meta-Analysis of Nonpharmacological Interventions for Neuropsychiatric Symptoms of Dementia. *Am J Psychiatry* 2012; 169:9
- Watt et al. Safety of pharmacologic interventions for neuropsychiatric symptoms in dementia: a systematic review and network metaanalysis. *BMC Geriatrics* 2020; 20:212-223
- Tariot P. et al. Trial of Pimavanserin in Dementia-Related Psychosis. *NEJM* 2021. 389:309-319
- Cummings J et al. Advances in the Management of Neuropsychiatric Symptoms in Neurodegenerative Diseases. *Current Psychiatry Reports* 2019; 21:79 *Current Psychiatry Reports* (2019) 21: 79