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Presented by:

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DeBusk College *of* Osteopathic Medicine

LINCOLN MEMORIAL UNIVERSITY

VALUES | EDUCATION | SERVICE

Biography

- Originally from Tennessee; Licensed to practice in TN and currently working at Vanderbilt Department of Psychiatry in Nashville
- Graduated from Lincoln-Memorial University, DeBusk College of Osteopathic Medicine in 2014
- Psychiatry residency at Rowan School of Osteopathic Medicine in 2018
- Fellowship in geriatric psychiatry at the New Jersey Institute for Successful Aging - Rowan SOM in 2019
- Professional interests include maintaining independence and dignity for the elderly as well as working with patients with varying types of dementia

Disclosures

- Jason Greenhagen, DO, has no relevant financial relationships to disclose.
- We will be discussing off-label use of multiple medications during this presentation.

Objectives

- Recognize symptoms of dementia and associated behavioral disturbances.
- Utilize evidence-based treatment for dementia with behavioral disturbances.
- Understand risks vs benefits of pharmacologic treatments in patients with dementia

Dementia Defined

Dementia is a general term for a decline in mental ability severe enough to interfere with daily life.

- Alzheimer's Association

Dementia Defined Continued…

- A group of symptoms associated with a decline in memory or other thinking skills severe enough to reduce a person's ability to perform everyday activities
- Memory, language, attention and concentration, executive functioning, and/or visual perception
- DSM-V – now termed Major Neurocognitive Disorder with specifiers of type and severity with/without behavioral disturbances

Dementia is Pervasive

- Dementia affects more than 5 million Americans of all ages
- ~13% of Americans age 65 years and older have dementia
- The prevalence of mild cognitive impairment (MCI) in 65 years and older is ~16%
- Almost 1 of every 3 patients 65 years and older seen in primary care have some degree of cognitive impairment

Moga, D., Roberts, M., & Jicha, G., (2017)

Dementia is Complex

- Most patients with dementia have multiple medical comorbidities
- Behavioral disturbances cause significant distress to the patients and their caregivers
- Primary Care plays a key role as the first line of assessment and treatment of patients with dementia

Parmar, J., Dobbs, B., McKay, R., Kirwan, C., Cooper, T., Marin, A., & Gupta, N., (2014)

Evaluation for Neuropsychiatric and Behavioral Symptoms

- Patient Health Questionnaire (PHQ-2 → PHQ-9)
- Neuropsychiatric Inventory – Questionnaire (NPI-Q)

American Medical Association, (2018)

Neuropsychiatric and Behavioral Symptoms

- Wandering, repetitive behaviors, exit seeking
- Anxiety, depression, apathy
- Changes in appetite and sleep
- Disinhibition, agitation, hallucinations, delusions

Lyketsos, C., Lopez, O., Jones, B., Fitzpatrick, A., Breitner, J., DeKosky, S. (2002)
Cerejeira, J., Lagarto, L., & Mukaetova-Ladinska, E. B. (2012)

How Common Are They?

- 43% of patients with Mild Cognitive Impairment have behavioral symptoms

- Up to 90% of all patients with dementia will have at least one behavioral symptom over the course of their illness

Lyketsos, C., Lopez, O., Jones, B., Fitzpatrick, A., Breitner, J., DeKosky, S. (2002)
Cerejeira, J., Lagarto, L., & Mukaetova-Ladinska, E. B. (2012)

Treatment

- Treat underlying medical comorbidities and any reversible causes
- Non-pharmacologic Interventions
- Pharmacologic Interventions

Moga, D., Roberts, M., & Jicha, G., (2017)

Medical Assessment

- Assessment for reversible causes (Delirium)
- Labs - CBC, BMP, LFT’s, TSH, RPR, B12, Folate, UA, and UDS
- Imaging – CT or MRI
- Medication Review and removal of “High-Risk Medications”

Moga, D., Roberts, M., & Jicha, G., (2017)

Medication Review for High-Risk Medications

- American Geriatrics Society 2019 Updated AGS Beers Criteria

- Primary Targets
  - Anticholinergics
  - Antipsychotics
  - Benzodiazepines
  - Opioids

American Geriatrics Society Beers Criteria® Update Expert Panel (2019)

Non-Pharmacologic Interventions

- Environmental modifications, assistive devices, and task simplification; PT/OT/ST
- Social Services for education, support, and resources
- Psychosocial practices - validation therapy, reminiscence therapy, music therapy, pet therapy, meaningful activities
- Sensory practices - aromatherapy, massage, multi-sensory stimulation, bright light therapy

Scales, K., Zimmerman, S., & Miller, S., (2018)

Caregiver and Needs

- Identification of caregiver(s)
- Understanding/knowledge
- Needs and social support
- Willingness/burden – caregiver burden scale

American Medical Association, (2018)

Caregiver Support

- Local Social Services Department
- Alzheimer's Association - www.alz.org
- Family Caregiver Alliance - www.caregiver.org
- Alzheimer's Disease Education and Referral Center - www.alzheimers.org/adear

Cummings, J., Cherry, D., Kohatsu, N., Kemp, B., Hewett, L., & Mittman, B., (2002)

Safety Concerns

- Driving Evaluations
- Level of Supervision
- Elder Abuse or Neglect

Cummings, J., Cherry, D., Kohatsu, N., Kemp, B., Hewett, L., & Mittman, B., (2002)

Pharmacologic Treatment

Pharmacologic Treatment

1st – Non-Pharmacologic Interventions!!!

Dementia Specific Medications

- Donepezil (Aricept) – Mild to Severe dementia
  - Start 5 mg qhs, then increase in 4-6 wks to 10 mg qhs
- Rivastigmine (Exelon) – Mild to Moderate dementia
  - Start 4.6 mg patch daily, then increase every 4 wks up to max of 13.3 mg daily
- Galantamine (Razadyne) – Mild to Moderate dementia
  - Start 4 mg BID, increase by 4 mg every 4 wks to a max of 24 mg/day

Reeve, E., Farrell, B., Thompson, W., Herrmann, N., Sketris, I., Magin, P., Chenoweth, L., Gorman, M., Quirke, L., Bethune, G., Forbes, F., & Hilmer, S.,

Dementia Specific Medications

- Memantine (Namenda) – Mod to severe dementia
  - Start 5 mg daily, then increase in increments of 5 mg up to 10 mg BID
- Memantine/donepezil (Namzaric) – Mod to severe dementia
  - 4 wk starter pack (7 mg ER/10 mg IR), max 28 mg ER/10 mg IR q hs

Reeve, E., Farrell, B., Thompson, W., Herrmann, N., Sketris, I., Magin, P., Chenoweth, L., Gorman, M., Quirke, L., Bethune, G., Forbes, F., & Hilmer, S.,

Dementia Specific Medications

- Target – To maintain function as long as possible
- Behavioral Effects – Small, but statistically significant efficacy
- Discontinuation
  - No benefit seen during treatment
  - Significant decline in cognition/function over 6 months
  - Severity of dementia with little function to preserve

Trinh, N., Hoblyn, J., Mohanty, S., & Yaffe, K., (2003)
Reeve, E., Farrell, B., Thompson, W., Herrmann, N., Sketris, I., Magin, P., Chenoweth, L., Gorman, M., Quirke, L., Bethune, G., Forbes, F., & Hilmer, S.,

Antidepressants

- Sertraline (Zoloft), Citalopram (Celexa), and Escitalopram (Lexapro) were associated with a reduction in symptoms of agitation

- Citalopram vs Risperidone
  - Agitation symptoms and psychotic symptoms decreased and did not differ significantly
  - Risperidone had significantly increased side effects

- Citalopram now includes a black box warning with doses over 20 mg daily in people over 60 yo for QTc prolongation

Pollock, B., Mulsant, B., Rosen, J., Mazumdar, S., Blakesley, R., Houck, P., Huber, K., (2007)
Masopust, J., Protopopová, D., Vališ, M., Pavelek, Z., Klímová, B., (2018)

Sleep Aids

- Melatonin – can be helpful in circadian rhythm disturbances; little evidence for long term sleep maintenance or doses >3 mg
- Trazodone (Desyrel) – can be helpful for sundowning and agitation and is more tolerated compared to antipsychotics (25-200 mg q hs)
- Mirtazapine (Remeron) – helpful for sleep, appetite, and mood
  - Lower doses = sleep and appetite (7.5 mg-15 mg q hs)
  - Higher doses = anti-depressant (30-45 mg q hs)
- Suvorexant (Belsomra) – safe and effective for primary insomnia in patients with dementia; expensive (5-20 mg q hs)
- Doxepin (Silenor) – H1 antagonist without anticholinergic effects (3-6 mg q hs)

McCleery, J., Cohen, D., & Sharpley, A., (2016)

Benzodiazepines and "Z-drugs"

- Benzodiazepines are not part of the recommended management of neuropsychiatric symptoms and should be avoided, especially for long-term management.

- Benzodiazepines carry significant risk of oversedation, delirium, and disinhibition, and may worsen behaviors that caregivers are trying to prevent.

Moga, D., Roberts, M., & Jicha, G., (2017)

- Benzodiazepines are associated with deterioration of cognitive functions, sedation, paradoxical disinhibition, risk of falls, and fracture of the femoral neck.

Masopust, J., Protopopová, D., Vališ, M., Pavelek, Z., Klímová, B., (2018)

Anticonvulsants

- Evidence varies significantly and risk of oversedation and falls is increased
- No current anticonvulsant is recommended

Masopust, J., Protopopová, D., Vališ, M., Pavelek, Z., Klímová, B., (2018)
Seitz, D., Adunuri, N., Gill, S., Gruneir, A., Herrmann, N., & Rochon, P., (2013)

Antipsychotics

- If possible, recommend referral to a geriatric psychiatrist.

- Only time these should be considered:
  - Hallucinations
  - Delusions
  - Physical Aggression

Antipsychotics

- No significant evidence of typical antipsychotic efficacy and high risk of adverse events

- Only modest evidence of atypical antipsychotic efficacy
  - Risperidone (Risperdal), Olanzapine (Zyprexa), Quetiapine (Seroquel)
  - Black box warning for “Increased mortality in elderly patients with dementia-related psychosis”
  - Rate of death = 4.5% (antipsychotic) vs 2.6% (Placebo)

Schneider, L., Tariot, P., Dagerman, K., Davis, S., Hsiao, J., Ismail, S., Lebowitz, B., Lyketsos, C., Ryan, M, Stroup, S., Sultzer, D., Weintraub, D., and Lieberman, J. for the CATIE-AD Study Group, (2006)

Antipsychotics

- Risperidone (Risperdal) – start 0.25 mg qhs; maximum of 1 mg daily
- Olanzapine (Zyprexa) – start 2.5 mg qhs; maximum of 10 mg daily
- Quetiapine (Seroquel) – start 25 mg qhs; maximum of 200 mg daily
  - NOT a primary sleep aid
- Pimavanserin (Nuplazid) – start 34 mg daily
  - Only approved for Parkinson's disease related psychosis
  - Takes 4-6 weeks to reach maximum benefit

Katz, I., Jeste, D., Mintzer, J., Clyde, C., Napolitano, J., Brecher, M., (1999)
Schneider, L., Tariot, P., Dagerman, K., Davis, S., Hsiao, J., Ismail, S., Lebowitz, B., Lyketsos, C., Ryan, M, Stroup, S., Sultzer, D., Weintraub, D., and Lieberman, J. for the CATIE-AD Study Group,

Case #1 – Restless Regina

Pt is a 79 yo female living at home with her husband. Her husband states that the pt will not sit still, constantly picks through things in the house, repeatedly asks about their children, and will become agitated if her concerns are ignored. What is the best pharmacologic treatment to consider?

A. Risperdal 0.5 mg QHS
B. Depakote DR 250 mg BID
C. Ativan 0.5 mg BID
D. Lexapro 10 mg Daily

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A. Risperdal 0.5 mg QHS

B. Depakote DR 250 mg BID

C. Ativan 0.5 mg BID

D. Lexapro 10 mg Daily

- Start Lexapro 5 mg daily x7 days, then increase to 10 mg daily to target symptoms of anxiety

Case #2 – Sleepless Sally

Pt is a 90 yo female living in an assisted living with memory care. Her family states that the pt does very well during the day and is "totally with it". However, she becomes much more confused at night, begins exit seeking, and gets more agitated and verbally aggressive. What is the best pharmacologic treatment to consider?

A. Zoloft 50 mg QHS
B. Trazodone 50 mg QHS
C. Ativan 0.5 mg QHS
D. Risperdal 0.5 mg QHS

Case #2 – Sleepless Sally

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A. Zoloft 50 mg QHS

B. Trazodone 50 mg QHS

- Start Trazodone 25 mg QHS, then increase to 50 mg QHS if needed

C. Ativan 0.5 mg QHS

D. Risperdal 0.5 mg QHS

Case #3 – Lazy Larry

Pt is a 68 yo male living at home with his son. His family states that the pt will sit in his recliner all day and all night if he is allowed. He will go over a week without showering or even brushing his teeth. The pt's son is concerned that his dad is depressed. When asking the pt if he feels depressed, he states "I'm fine. Everything's good." What is the best pharmacologic treatment to consider?

A. Zoloft 50 mg QHS
B. Seroquel 25 mg BID
C. Aricept 10 mg QHS
D. Cymbalta 30 mg Daily

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A. Zoloft 50 mg QHS

B. Seroquel 25 mg BID

C. Aricept 10 mg QHS

- Add Aricept 5 mg QHS x4 weeks, then increase to 10 mg QHS for Apathy

D. Cymbalta 30 mg Daily

Case #4 – Agitated Agnes

Pt is an 85 yo female living in a nursing home. The staff report that the pt is "constantly agitated" and "aggressive". When asked what prompts the pt's behaviors, they state "Anything! She will just hit for no reason!" What is the best pharmacologic treatment to consider?

A. Risperdal 0.5 mg QHS
B. Lexapro 10 mg Daily
C. Ativan 0.5 mg BID for the patient
D. Ativan 0.5 mg BID for the staff

Case #4 – Agitated Agnes

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A. Risperdal 0.5 mg QHS

- Add Risperdal 0.25 mg QHS, then increase to 0.5 mg QHS in 7 days if needed

B. Lexapro 10 mg Daily

C. Ativan 0.5 mg BID for the patient

D. Ativan 0.5 mg BID for the staff

Conclusions

- Dementia is common and behavioral disturbances occur in the majority of patients
- Non-Pharmacologic interventions are first line, and if possible, a multidisciplinary approach is best
- Psychotropic medications can help with some behavioral symptoms of dementia but should be used in much lower doses and monitored closely

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Questions???