



Duke Dementia Family Support Program

Caregiver Connections

An Educational Webinar Series with the Experts

The presentation will begin shortly.

dukefamilysupport.org

919-660-7510

The Medication Minefield

Understanding Risky Drugs & Behavioral Symptom
Treatments in Dementia

Tasha Woodall, PharmD, BCGP, CPP, FNCAP

Drug-Induced Cognitive Impairment

Can Show Up in Many Different Ways

Memory
Impairment

Confusion

Disorientation

Attention/Focus

Slowed
Processing

Language
Difficulties

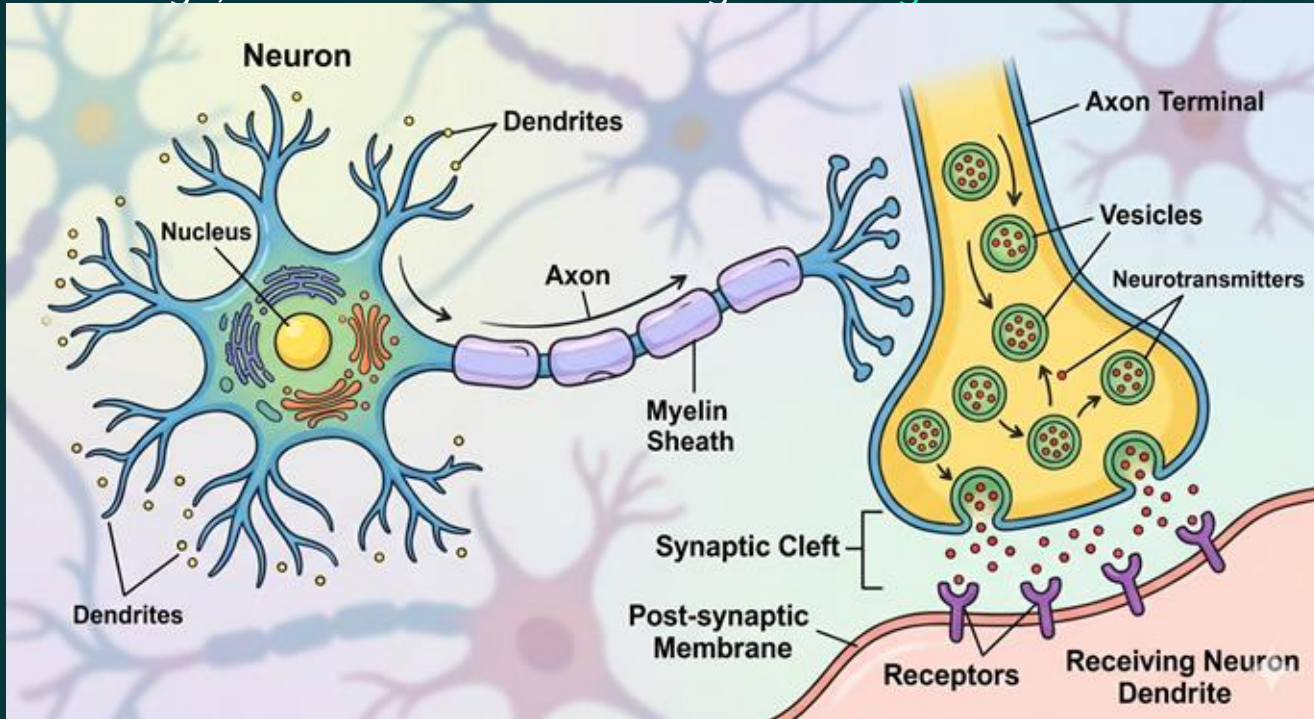
Reduced
Decision-
Making
Capacity

Motor
Slowness

Delayed
Responses

Pathway #1: Anticholinergic Activity

As we age, the number of functioning **cholinergic** neurons decreases



Common Anticholinergic Drugs

Older

Antidepressants

- Paroxetine
- Amitriptyline
- Imipramine
- Nortriptyline
- Desipramine

Antihistamines

- Diphenhydramine
- Doxylamine
- Hydroxyzine
- Chlorpheniramine
- Meclizine

Muscle Relaxants

- Cyclobenzaprine
- Methocarbamol
- Baclofen
- Carisoprodol
- Metaxalone

Anticholinergic Cognitive Burden (ACB) Scale

Assigns medications 1, 2, or 3 points based on how anticholinergic they are

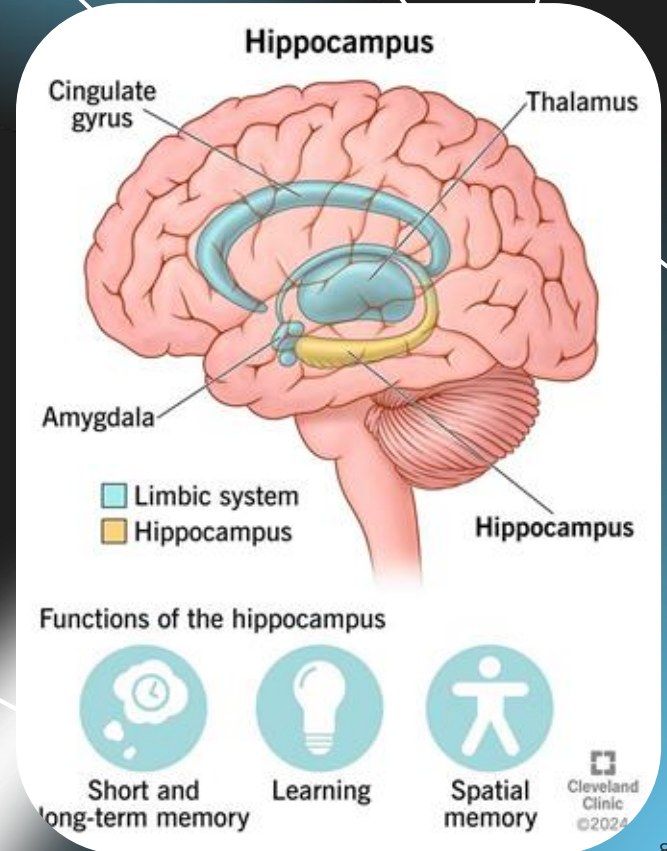
Higher scores have been associated with:

- More cognitive side effects
- Higher risk of dying earlier

Pathway #2: Sedating the Brain

Drugs commonly used for sleep, anxiety, or pain amplify the depressive effect of **GABA** and accelerate volume loss in the hippocampus.

Often improves upon discontinuation, but can persist.



Sedative Hypnotics

Benzodiazepines

- Alprazolam
- Clonazepam
- Lorazepam
- Temazepam
- Diazepam

“Z-Drugs”

- Zolpidem
- Zaleplon
- Eszopiclone

Opioids

- Regular use is associated with higher risk of dementia in those with chronic pain
- May be exposure-dependent (i.e., higher dose, longer duration)
- Can be difficult to assess:

Chronic pain

- Decreased attention
- Inflammation and stress

Opioid use

- Sleep disturbances
- Mood changes
- Social isolation

Other Possible Culprits

Dopamine agonists
(pramipexole, ropinirole)

Steroids
(prednisone)

NSAIDs
(ibuprofen, naproxen)

Statins
(simvastatin, atorvastatin)

Blood pressure medications

“Newer” antidepressants
(sertraline, duloxetine)

Antipsychotics
(haloperidol, quetiapine)

Proton pump inhibitors
(omeprazole, pantoprazole)

Chemotherapy agents

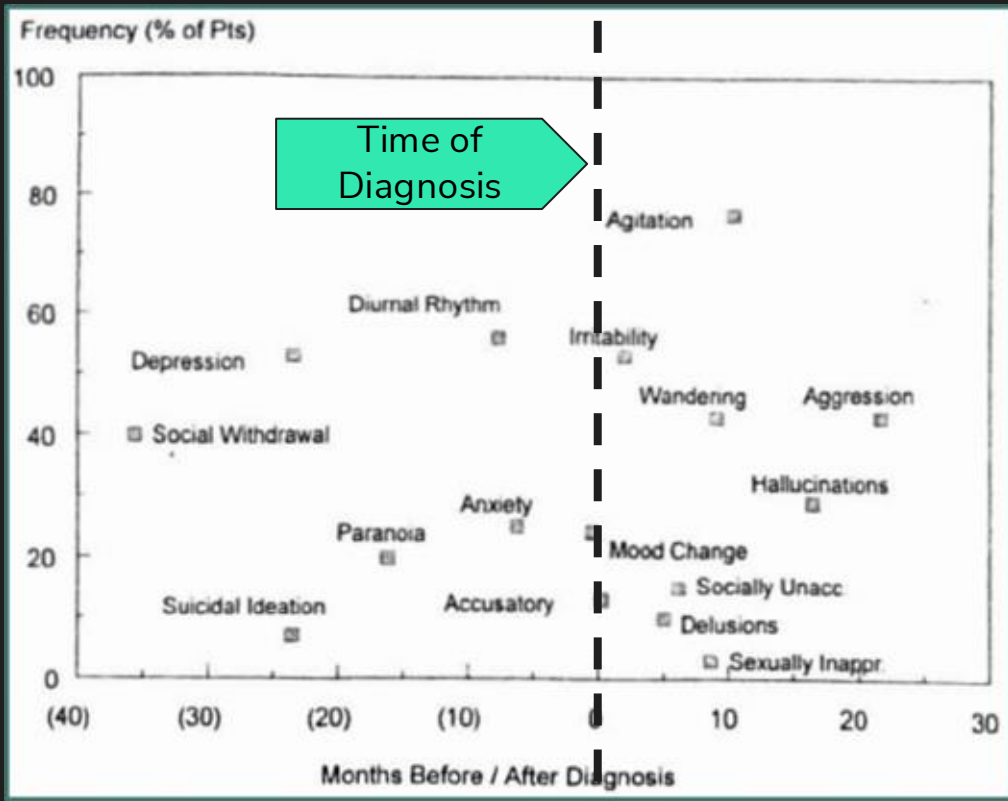
Antiseizure medications
(topiramate, gabapentin)



General Anesthesia

- May accelerate decline in vulnerable individuals (i.e., those with dementia)
 - Structural brain changes → lower cognitive scores
- Difficult to distinguish between influence of anesthesia and effect of surgery itself

Medications for Behavioral Symptoms



Antipsychotics

(risperidone, quetiapine, aripiprazole, olanzapine, brexpiprazole, pimavanserin, etc.)

- None are FDA-approved for dementia-related behaviors *except* brexpiprazole
- Vary in their effectiveness for a range of behavioral symptoms
 - Most studied for psychosis, agitation, aggression
- Weigh benefits vs. risks:
 - Abnormal movements, sedation, steeper cognitive decline, premature death

Attempt gradual withdrawal when and if possible.

If initially unsuccessful, reattempt at regular intervals.

Boxed warning: (1-2%) increased risk of death; highest during first month of use, sustained for up to 2 years



Mood Stabilizers

(carbamazepine, valproic acid, etc.)

- Evidence is shaky
- Weigh benefits vs. risks:
 - Sedation
 - Abnormal movements
 - Steeper cognitive decline
 - Dizziness
 - Drug-drug interactions

Antidepressants (citalopram, etc.)

- May be modestly effective for agitation
- Most preferred:
 - Citalopram/escitalopram (more calming)
 - Sertraline (more activating)
- Less preferred:
 - Bupropion (can worsen anxiety, psychosis)
 - Paroxetine (anticholinergic)

Before Filling the Prescription...

1 Understand the goal.

What specific behavior are you trying to address?
Is it causing distress for the person with dementia?

2 Know what alternatives exist.

Have underlying causes been ruled out?
Are there environmental changes you haven't tried yet?

3 Discuss a plan for deprescribing.

When do risks outweigh benefits?

A white, curved line starts from the top left corner and extends diagonally towards the center of the slide.

Thank You!

Ask me questions!

Tasha.Woodall@mahec.net



Duke Dementia Family Support Program

Caregiver Connections

An Educational Webinar Series with the Experts

Thank you for joining us today!

dukefamilysupport.org

919-660-7510