Psychotropic Medication Use in Dementia

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Disclosures

* None

Outline

* Epidemiology of psychiatric conditions in older adults
* Psychotropic medications and their risks
* Clinical decision making

Epidemiology of Psychiatric Conditions in Dementia

* Anxiety
* Apathy
* Depression
* Irritability
* Sleep disturbance
* Eating disturbance
* Disinhibition
* Agitation/Aggression
* Psychosis
  * Hallucinations
  * Delusions

Behavior	Mild %	Moderate %	Severe %
Delusions	12	25	31
Hallucinations	12	15	8
Agitation	47	55	85
Dysphoria	12	45	62
Anxiety	24	65	54
Euphoria	18	0	8
Apathy	47	80	92
Disinhibition	35	40	54
Irritability	35	40	54
Aberrant motor	12	30	84

Adapted from Mega et al. Neurology 1996.

History

* Passage of OBRA 1987 to protect residents of LTC from medically unnecessary medications (and physical restraints) being used for convenience
* Use of psychotropic medications exposes patients to adverse side effects and can lead to deterioration of medical and cognitive status

Psychotropic Medications

* Antidepressants
* Anxiolytics, sedatives, and hypnotics
* Stimulants
* Mood stabilizers
* Neuroleptics
* Cognitive enhancers/stabilizers

Antidepressants

Antidepressant Categories

* SSRIs and SNRIs
* TCAs
* MAOIs
* Miscellaneous

Indications/Uses

* FDA approval
  * Depression
  * Anxiety
* Other uses
  * Irritability
  * Impulsivity
  * Sleep aid

Antidepressants

* SSRIs
  * Fluvoxamine, fluoxetine, paroxetine, citalopram, sertraline, escitalopram

All ages	Especially in older adults
Gastrointestinal upset	Hyponatremia
Serotonin syndrome	Falls/hip fractures
Akathisia	QTc prolongation (citalopram)
	Osteoporosis
	Anticholinergic side effects (some)
	Increased risk of bleeding if on anticoagulants

Antidepressants

* SNRIs
  * Venlafaxine, duloxetine

All ages	Especially in older adults
Gastrointestinal upset	Hyponatremia
Serotonin syndrome	Hypertension
Akathisia	Falls?/hip fractures?
	Osteoporosis?
	Increased risk of bleeding if on anticoagulants?

Antidepressants

* TCAs
  * Amitriptyline, climipramine, desipramnie, doxepin, imipramine, nortriptyline, protriptyline, trimipramine

All ages	Especially in older adults
Gastrointestinal upset	Anticholinergic side effects
Serotonin syndrome	Cardiac dysrhythmias
Akathisia	Hyponatremia
	Falls/hip fracture
	Osteoporosis?
	Increased risk of bleeding if on anticoagulants?

Antidepressants

* MAOIs
  * Isocarboxacid, phenelzine, selegiline (oral and *patch*), tranylcypromine

All ages	Especially in older adults
Gastrointestinal upset	Anticholinergic side effects
Hypertensive crisis	Cardiac dysrhythmias
Serotonin syndrome	Hyponatremia
	Falls?
	Osteoporosis?
	Increased risk of bleeding if on anticoagulants?

Antidepressants

* Miscellaneous
  * Bupropion
  * Mirtazapine
  * Trazodone

Bupropion	Mirtazapine	Trazodone
Anticholinergic/confusion	Blood dyscrasias	Orthostasis
Psychosis?	Sedation	Sedation
Decreased appetite?	Increased appetite	Cardiac dysrhythmias

Anxiolytics, Sedatives, & Hypnotics

Anxiolytics

* SSRIs, SNRIs, TCAs, and MAOIs
* Benzodiazepines
* Miscellaneous
  * Buspirone, trazodone
  * Propranolol, clonidine
  * Antihistimines
  * Antiepileptics (AEDs)

* Medications listed on this slide are not necessarily FDA approved to treat anxiety

Anxiolytics

* Benzodiazepines
  * Chlordiazepoxide, diazepam, alprazolam, triazolam, estazolam, flurazepam, chlorazepate
  * ***Lorazepam, oxazepam, temazepam***
    * *Do not require oxidation*

Anxiolytics

* Benzodiazepines
  * FALLS, FALLS, FALLS!!!
  * CONFUSION, CONFUSION, CONFUSION!!!
  * Paradoxical reactions
  * More likely to have withdrawal symptoms (and to have these symptoms misrecognized)
  * Dementia
  * Depression
  * Misuse

Anxiolytics

* Miscellaneous
  * Buspirone
  * Trazodone → mild anticholinergic effects, sedation
  * Propranolol, clonidine → hypotension, can potentially address 2 problems with 1 medication
  * Antihistamines → tend to be anticholinergic

Sedative/Hypnotics

* Benzodiazepines
* Non-benzodiazepine hypnotics
  * Zolpidem
  * Zaleplon
  * Eszopiclone
* Melatonin receptor agonist: Ramelteon
* Miscellaneous
  * Trazodone, mirtazapine, and chloral hydrate

Sedative/Hypnotics

* Non-benzodiazepine hypnotics
  * Have many of the same side effects as benzodiazepines including
    * Falls
    * Confusion
    * Misuse

Sedative/Hypnotics

* Melatonin receptor agonist: Ramelteon
  * Generally well tolerated
* Miscellaneous
  * Trazodone, mirtazapine
  * Chloral hydrate → similar to alcohol

* Medications listed on this slide are not necessarily FDA approved to treat sleep disorders

Stimulants

Stimulants

* May be helpful for apathy, amotivation, depression
* Buproprion
  * Anticholinergic properties
  * May worsen anxiety
* Methylphenidate
  * Tachycardia, hypertension, confusion, hallucinations
  * May worsen anxiety

* Medications listed on this slide are not necessarily FDA approved to treat apathy or depression

Mood Stabilizers

Mood Stabilizers

* May be useful for impulsivity and irritability
* Divalproex, valproic acid, valproate
  * Dizziness, falls, elevated liver enzymes, elevated ammonia, weight gain, hair loss
* Carbamazepine
  * Blood dyscrasias, elevated liver enzymes, interactions with other medications

* Medications listed on this slide are not necessarily FDA approved to treat impulsivity or irritability

Neuroleptics

Neuroleptics

* Typical (first generation)
  * Chlorpromazine, thioridazine, trifluoperazine, fluphenazine, perphenazine, prochlorperazine, thiothixene, loxapine, pimozide, haloperidol
* Atypical (second generation)
  * Clozapine, risperidone, olanzapine, quetiapine, ziprasidone, aripiprazole

Appropriate indications	Inappropriate indications
Acute psychotic episode, atypical psychosis, brief reactive psychosis	Agitated behaviors that do not represent danger to patient or others
Schizophrenia, schizoaffective disorder, schizophreniform disorder	Anxiety, nervousness
Delusional disorder	Depression without psychotic features
Huntington's disease	Fidgeting, restlessness, wandering
Mood disorder with psychotic features	Impaired memory
Tourette's syndrome	Indifference to surroundings, poor self care
Short term (<7 days) treatment of hiccups, pruritis, nausea, or vomiting	Insomnia
Organic mental syndromes including dementia and delirium with associated psychotic and/or agitated behaviors*	Uncooperativeness, unsociability

* Medications listed on this slide are not FDA approved to treat problematic behaviors associated with dementia

Neuroleptics

All ages	Especially in older adults
Weight gain	Sudden death (black box)
Diabetes/metabolic syndrome	EPS/Parkinsonism
Sedation	Anticholinergic effects
Akathisia	Cardiac dysrhythmias
Dystonic reactions	Hyponatremia
	Seizures

Black Box Warning

"Increased risk of death when used in elderly patients treated for dementia-related psychosis"

Atypicals 2005

Typicals 2008

Cognitive Enhancers

Cognitive Enhancers

* Acetylcholinesterase inhibitors
  * Donepezil, galantamine, rivastigmine
  * Most common side effects: GI, vivid dreams (donepezil)
  * Peripheral cholinergic side effects (cardiac)
* NMDA antagonist
  * Memantine
  * Most common side effect: GI
  * Paradoxical agitation

Cognitive Enhancers

* FDA approval
  * Alzheimer's disease/dementia
* Evidence suggests beneficial in vascular dementia, dementia related to Parkinson's disease, and perhaps in some FTD
* Evidence suggests beneficial in neuropsychiatric symptoms of dementia!


WARNING
ROCK AND A
HARD PLACE
JUST AHEAD
teamfiard.com

Guidelines for Use of Psychotropic Medicinations

* Appropriate and documented diagnosis associated with medication being prescribed
* Try and document trials of behavioral management
* Document assessment of medication's side effects
* Document benefit of medication for resident
* Documentation of dose reduction trial
* Explanation for continued medication

Clinical Decision Making

Clinical Decision Making

* What is the issue/behavior?
* What might be causing it or contributing to it?
* Is there a way to quantify or measure the degree of symptomatology (e.g., a screening instrument)?
* Is it an issue that can be completely or partially addressed without medication?

Clinical Decision Making

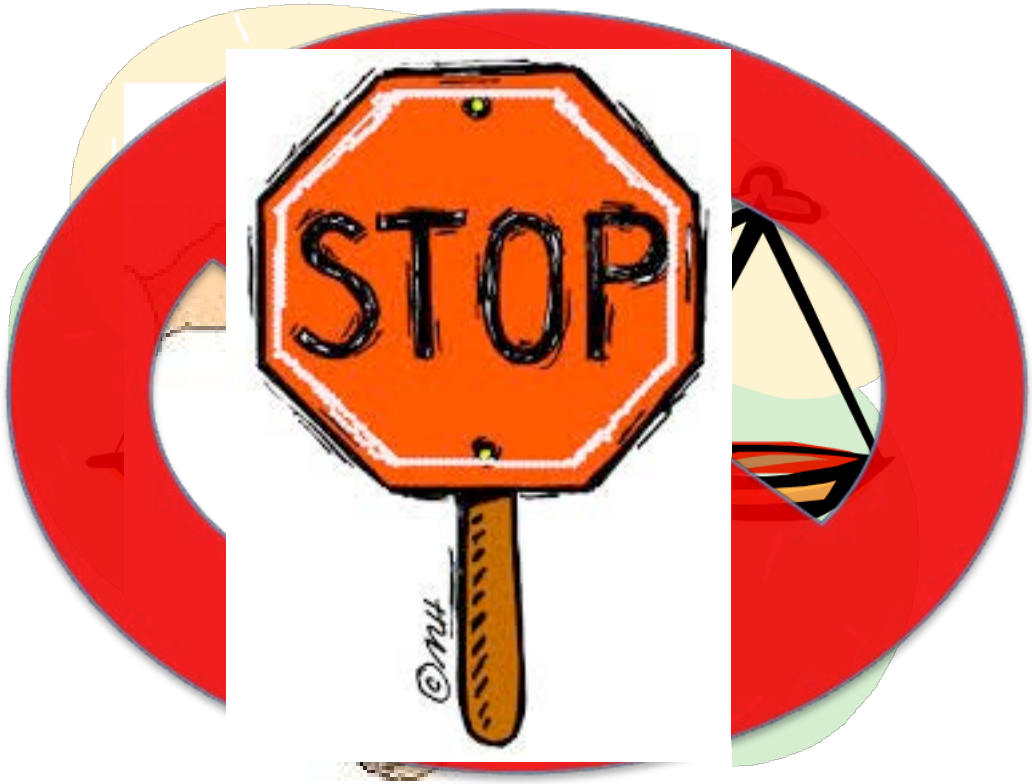
So, a medication is needed…

* Is there a medication that the individual is already on that can be adjusted to address the behavior?
* What are the individual's comorbidities and do they prevent the use of any medications?
* What are the most benign medications that can be used?
* Are there any side effect profiles that can be useful?

Clinical Decision Making

Once on medication…

* Monitor and document response of symptoms
* Monitor and document screening for side effects (e.g., sodium, falls, AIMS)
* Conduct periodic trials of a decreased dose or taper off the medication to determine if it's still needed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