Common Geriatric Psychiatry Issues in Residential Care

A Residential Care Initiative Learning Series Event
June 6, 2017

Learning Objectives

- Expected Adjustment to Care
- Identification of Depression in the Dementia Population & Treatment Options
- Behavioural and Psychological Symptoms of Dementia, Etiology & DDx
- Non-pharma & Pharma Interventions for BPSD
- De-prescribing of Psychiatric Medications

Disclosures

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  - **Other:** none

NOTE

BPSD = NPS

Dementia = Major NCD

Dementia & Residential Care

Patient Case

Mr. D is a 75 year old male, married, father of 2 children (in Vancouver). He lives in a 2 story home in Oak Bay and is a retired university professor (10 years ago). He was never very social and his main interests have been reading and going for long walks with his dog. He has no formal psychiatric history.

Mr. D dutifully visits his family physician at least twice a year. Past medical history is significant for hypertension, DM, CAD, and a possible family Hx of dementia.

2 years ago, his wife mentioned some short term memory loss. At that time he remained independent for IADLs, and scored 29/30 on the MMSE, losing 1 point on delayed recall.

Patient Case

Over the next 2 years, Mr. D's short term memory deteriorated further and he had difficulty learning how to use a new computer and TV remote control. When his wife learned that Mr. D had uncharacteristically failed to pay a number of household bills, they returned to see their family physician. He scored a 25/30 on a repeat MMSE and after a dementia workup, he was given a diagnosis of Alzheimer's dementia *(Major Neurocognitive Disorder, mild severity, possibly Alzheimer's disease).*

A year later, Mr. D's wife developed some neurologic symptoms and was admitted to hospital after suffering a seizure. Imaging showed a large glioblastoma and she deteriorated quickly. Upon hospitalization, it became clear to Mr. D's visiting children how dependent he was on his wife for IADLS.

After a short stay in acute care, Mrs. D died at hospice. A decision was made for Mr. D to enter residential care.

What is the level of dementia and frailty in BC Residential Care Facilities?

- 30,000 residential care beds in BC.
- 2,700 residential care beds in South Island.
- 75% of residents have a diagnosis of Major Neurocognitive Disorder (MND)
- 20% of the resident population dies in the course of a year.
- Average length of stay of residents – 14 months.
- 40% of new admits die within 1 year – 20% of this group die in the first month.
- 90 % of residents die in place.

Where do residents come from?

- Acute Care
- Own home
- Family’s home
- Assisted Living
- Residential Care transfer

What are the reasons for admission to Residential Care?

- Living at risk/ failure to thrive
- Caregiver Burden
- Increasing physical and cognitive frailty
- Neuropsychiatric symptoms (NPS) complicating dementia

Who are the Decision Makers?

- The resident
- The Family – committee of person?
- Mental Health Act – Extended Leave

What are the Challenges?

- Family culture - expectations
- Facility culture - expectations
- Common challenges:
    - Loss - independence, control, dignity, stature, privacy, routine, familiar social and physical environment

What are the Common Responses to Residential Care Admission?

- Grief
- Adjustment Disorder with depressed and/or anxious mood
- Major Depression
- Increasing NPS

What about Mr. D's premorbid personality/ lifestyle may make for a difficult adjustment to LTC?

How long would we expect the adjustment to persist?

What behaviours would be more concerning, warranting intervention?

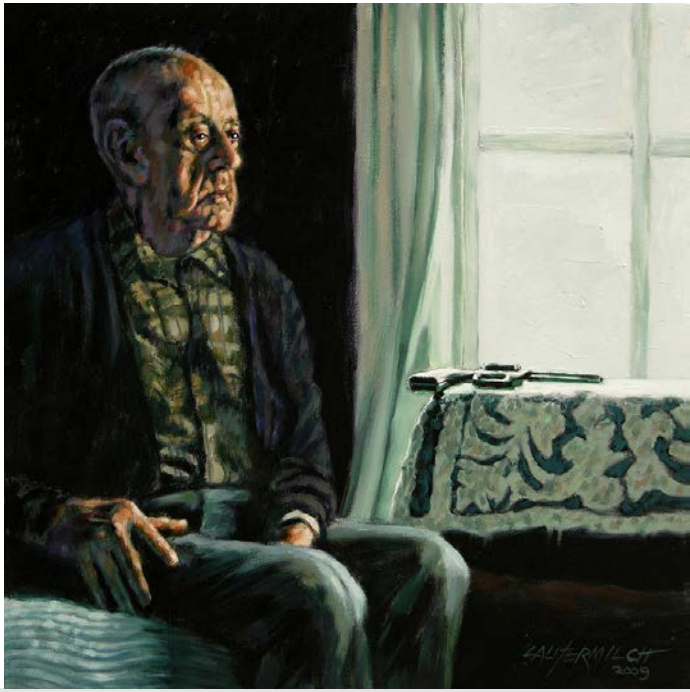
Patient Case

After 6-8 weeks, Mr. D settles in to life in residential care.

He switches from a shared room to a single occupancy room, and he appreciates the privacy this affords him.

He is in the dining room for all meals and interacts well with his tablemates. He has befriended a fellow female patient and goes on group bus trips.

Late Life Depression



Take Home Message

Be vigilant regarding Late Life Depression in LTC but don’t be too quick to prescribe.

LLD Prevalence

General population:

- MDD 6.6%

Senior population (community):

- MDD 2%
- Minor Depression 14%

Senior population (LTC):

- MDD 11.4%
- Minor Depression 16.8% (11-78%)

Dementia:

- Clinically Significant Depression 25%

LLD Morbidity

Increased disability / decreased function

Increased utilization of services

Accelerated cognitive decline

Impaired quality of life

Association with cardiac illness

Suicide

Suicide (rate per 100,000)

General Population in Canada:

- Women 4.96
- Men 17.04

Seniors 65 and up:

- Women 3.21-5.33
- Men 16.5-27.84 (Rate goes up with age)

In Long Term Care:

- Suicide rate: 19-35
- Suicidal Ideation 5-33%

Risk Factors for LLD

Female

Chronic Medical Illness

Cognitive Impairment severity

Functional Impairment

Lack of Social Supports

Personality Traits

Stressful life events

History of Depression

Advanced age

Patient Case

You haven't seen Mr. D in a few months since his last yearly review. Staff send a fax to your office reporting a steady worsening of Mr. D's cognition and function. He is increasingly dependent with his ADLs and has developed some urinary and fecal incontinence. They note that he seems more withdrawn and are querying depression.

What tools are available to screen for depression?

Screening

DSM V criteria

S	Sad Mood
I	Interest
G	Guilt or Worthlessness
E	Energy
C	Concentration
A	Appetite
P	Psyochomotor Agitation/Retardation
S	Sleep

- Depression +/- Anhedonia
- 5 or more criteria
- 2 weeks
- Not better accounted for by medical condition or Substance use

Screening:
Geriatric Depression Scale

Choose the best answer for how you have felt over the past week:

1. Are you basically satisfied with your life? YES / **NO**
2. Have you dropped many of your activities and interests? **YES** / NO
3. Do you feel that your life is empty? **YES** / NO
4. Do you often get bored? **YES** / NO
5. Are you in good spirits most of the time? YES / **NO**
6. Are you afraid that something bad is going to happen to you? **YES** / NO
7. Do you feel happy most of the time? YES / **NO**
8. Do you often feel helpless? **YES** / NO
9. Do you prefer to stay at home, rather than going out and doing new things? **YES** / NO
10. Do you feel you have more problems with memory than most? **YES** / NO
11. Do you think it is wonderful to be alive now? YES / **NO**
12. Do you feel pretty worthless the way you are now? **YES** / NO
13. Do you feel full of energy? YES / **NO**
14. Do you feel that your situation is hopeless? **YES** / NO
15. Do you think that most people are better off than you are? **YES** / NO

Answers in **bold** indicate depression. Score 1 point for each bolded answer.

A score > 5 points is suggestive of depression.
A score ≥ 10 points is almost always indicative of depression.
A score > 5 points should warrant a follow-up comprehensive assessment.

Valid if MMSE > 14/30

>5: Suggestive of Depression
≥10: Likely Depression

Screening
Cornell Scale for Depression in Dementia

Screening Tool: Cornell Scale for Depression in Dementia (CSDD)

Scoring System: a = unable to evaluate
0 = absent
1 = mild or intermittent
2 = severe

Ratings should be based on symptoms and signs occurring during the week prior to interview. No score should be given if symptoms result from physical disability or illness.

A. Mood-Related Signs

1. Anxiety anxious expression, ruminations, worrying	a	0	1	2
2. Sadness sad expression, sad voice, tearfulness	a	0	1	2
3. Lack of reactivity to pleasant events	a	0	1	2
4. Irritability easily annoyed, short-tempered	a	0	1	2

B. Behavioral Disturbance

1. Agitation restlessness, handwringing, hairpulling	a	0	1	2
2. Retardation slow movements, slow speech, slow reactions	a	0	1	2
3. Multiple physical complaints (score 0 if GI symptoms only)	a	0	1	2
4. Loss of interest less involved in usual activities (score only if change occurred acutely, i.e., in less than 1 month)	a	0	1	2

C. Physical Signs

1. Appetite loss eating less than usual	a	0	1	2
2. Weight loss score 2 if greater than 5 lb. in one month	a	0	1	2
3. Lack of energy fatigues easily, unable to sustain activities (score only if change occurred acutely, i.e., in less than 1 month)	a	0	1	2

continued on reverse →

D. Cyclic Functions

1. Diurnal variation of mood symptoms worse in the morning	a	0	1	2
2. Difficulty falling asleep later than usual for this individual	a	0	1	2
3. Multiple awakenings during sleep	a	0	1	2
4. Early-morning awakening earlier than usual for this individual	a	0	1	2

E. Ideational Disturbance

1. Suicide feels life is not worth living, has suicidal wishes or makes suicide attempt	a	0	1	2
2. Poor self-esteem self-blame, self-deprecation, feelings of failure	a	0	1	2
3. Pessimism anticipation of the worst	a	0	1	2
4. Mood-congruent delusions delusions of poverty, illness or loss	a	0	1	2

Scoring:

A score >10 probably major depressive episode
A score >18 definite major depressive episode

How to obtain permission to use the Cornell Scale for Depression in Dementia:

George Alexopoulos, M.D.
New York Hospital—Cornell Medical Center
Westchester Division
21 Bloomingdale Road
White Plains, NY 10605

OR

Elsevier Science
Subsidiary Right Dept.
P.O. Box 800
Oxford OX5 1DX
United Kingdom

What additional information would you want to gather from staff regarding their concern about depression?

Further Review

Recent medical issues

Recent stressors

Medications

Repeat Cognitive Testing

Investigations:

- CBC, lytes, BUN, Creat, AST, ALT, Ca, Albumin, TSH, B12
- Urinalysis if indicated
- ?ECG (baseline)

Patient Case

Staff report that Mr. D's affect no longer brightens when his children visit. He has been increasingly annoyed by his tablemates. He frequently asks staff to send him to the emergency for various somatic complaints. He requires a lot encouragement to participate in activities and sometimes to eat. He tends to seem to be in better spirits by mid afternoon. He was formally sleeping well but is now often noted walking the halls at 5AM. Staff contacted you after Mr. D voiced "what's the point" to one of the HCAs encouraging him to get dressed. There have been no know new psychosocial stressors. He has not started on any new medications. His recent MMSE was 18/30 and his score on the GDS was 8/15.

What are the recommended treatment options for MDE in Long Term Care?

Treatment

Guidelines:

- **Canadian Coalition for Seniors' Mental Health: The Assessment and Treatment of Mental health Issues in Long Term Care Homes** (updated 2014)
- **Canadian Network for Mood and Anxiety Treatments (CANMAT) Clinical Guidelines for the Management of Adults with Major Depressive Disorder** (September 2016)

Review Articles:

- Management of Depression in Older Adults, Kok & Renolds, JAMA 2017
- Treatment of Depression in Nursing Home Residents without significant Cognitive Impairment – a Systematic Review, Simning & Simons, Int. Psychogeriatrics 2017
- Management of Depresion in Patients with Dementia – Is Pharmacological Treatment Justified, Ford & Almeida, Drugs Aging 2017
- Pharmacotherapy of Major Depression in Late Life – What is the Role of New Agents, Patel et al. Expert Opinion on Pharmacotherapy, April 2017

Is Pharmacotherapy Effective for Late Life Depression in Long Term Care?

Evidence challenging to interpret:

- Minimal evidence
- Small sample sizes
- Some data pulled from studies using mostly younger and healthier patients
- Studies typically exclude unstable, medically frail patients
- Populations often heterogeneous
- Often poor quality studies with inappropriate controls or poorly defined outcome measures
- High placebo response

Are Antidepressants Effective for Late Life Depression in Long Term Care?

Late Life Depression:

- Mixed evidence
- More effective for younger patients
- More effective for severe depression
- Less effective with increased cognitive impairment
- Less effective with comorbid medical illness

Long Term Care:

- Mixed evidence

Dementia:

- Mixed evidence

Drugs can Harm!

Guidelines

"Overall, recent systematic reviews and meta-analyses support the efficacy of antidepressants in LLD"

"Treatment recommendations for Late Life Depression have been evidenced-informed, rather than evidence-based"

Guidelines: CCSMH

- **Treatment for residents with severe MDD should include an antidepressant. Less severe depression should get psychosocial interventions. If depression persists, antidepressants should be considered**
- First Line antidepressants include:
  - SSRI's (Citalopram, Escitalopram, Sertraline)
  - Venlafaxine
  - Mirtazapine
  - Bupropion
  - Duloxetine

Guidelines:
CANMAT Guideline for Pharmacotherapy

Table 6. Algorithmic Pharmacological Treatment of Late-Life Depression.

Recommendation	Treatment	Level of Evidence
First line	Duloxetine, mirtazapine, nortriptyline	Level 1
	Bupropion, citalopram/escitalopram, desvenlafaxine, duloxetine, sertraline, venlafaxine, vortioxetine	Level 2
Second line	Switch to	
	Nortriptyline	Level 1
	Moclobemide, phenelzine, quetiapine, trazodone	Level 2
	Bupropion	Level 3
	Combine with	
	Aripiprazole, lithium	Level 1
	Methylphenidate	Level 2
Third line	Switch to	
	Amitriptyline, imipramine	Level 2
	Combine SSRI or SNRI with	
	Bupropion, SSRI	Level 3

SNRI, serotonin and norepinephrine reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor.

Guidelines

Start Low, Go Slow and Keep Going

Response should be noticed by 2-4 weeks

Options for Treatment Failure include:

- Switch
- Combine
- Augment

Maintenance

Non-Pharmacological Treatments for Late Life Depression in Long Term Care

Psychotherapy (Individual or Group)

- CBT (mixed results)
- Problem Solving Therapy (mixed results)
- Acceptance and Commitment Therapy (no significant effect)

Psychosocial / Recreational Intervention (Possibly effective)

- Exercise
- Avian Therapy
- Companion Dog
- Video Conferencing
- Weekly Dance Intervention

Non-Pharmacological Treatments for Late Life Depression in patients with Dementia

Psychotherapy:

- Mixed Evidence for CBT
- Weak evidence for: IPT

Psychosocial / Recreational Interventions (Recommended)

- Mixed evidence for:
  - Reminiscence Therapy
  - Validation Therapy
  - Reorientation
  - Music Therapy
  - Snoezelon

Patient Case

After meeting with Mr. D and gaining collateral from staff and family and ruling out other causes of the current presentation, you believe Mr. D is suffering from a major depressive episode of mild-moderate severity.

Efforts are made to engage him in several psychosocial activities. A scrap book of personal pictures is brought in and staff are encouraged to engage him around positive memories about his life. A paid companion is hired to support him on short walks. Despite these efforts, his mood symptoms do not change much over the next month. Over the past couple months, he has lost 5 kilograms.

Patient Case

Mr. D is initiated on Citalopram 10mg and after 1 week, the dose is increased to 20mg. His mood improves over the next several weeks. Although staff note a significant decline since his admission in the amount of assistance Mr. D requires, they are pleased to see him taking some pleasure in daily life.

Take Home Message

Be vigilant in screening for depression for but don’t be too quick to prescribe.

BPSD


emotional distress
Agitation
motor activity
definition
dementia
ADWG
Alzheimer's disease
physical aggression
IPA
cognitive impairment
verbal aggression
Alzheimer's disease
International Psychogeriatric Association
emotional distress
dementia

Patient Case

Mr. D develops a delirium when he contracts a bacterial pneumonia. He receives antibiotics which results in diarrhea. Staff are having to perform personal care more often and Mr. D has become combative during it. You receive a fax requesting “something to allow safe care”.

“How do you respond to this request? ”

Patient Case

Mr. D's delirium is treated, his pneumonia resolves, and he settles over the next week. Care remains a challenge but all staff are now adhering to the care plan and are able to maintain adequate hygiene.

Behavioural & Psychological Symptoms of Dementia

- Disturbances in perception, thought content, mood or behaviour

- *Often patient's best attempt to respond to environment*

Neurobiology

- Combo of serotonergic, noradrenergic, cholinergic and dopaminergic dysfunction
- Fronto-limbic disassociation
- Deficits in frontal cortex, cingulate, amygdala and hippocampus
- Misinterpretation of threats and affective dysregulation

BPSD

- Aggression
  - Boredom, communication, discomfort
- Yelling out
  - Pain, loneliness, depression, perseveration/"The Screamer"
- Repetitive motor activity
  - Rummaging, Wandering
- Shadowing
- Hoarding
- Disinhibition, incl. sexually inappropriate behaviour
- Depression
- Anxiety
- Psychosis
  - Delusions > Hallucinations
  - Common: hose invasion, stolen property, Capgras, unfaithful spouse
- Apathy
- Sleep disturbance

Statistics

- 98% of patients have NPD during the course of their illness
  - 16 to 54% have delusions
  - 5 to 39% have hallucinations
  - 17 to 84% have apathy
  - 48 to 82 % have agitation
  - 11 to 44% have aggression

Differential

- Depression
- Acute medical condition (infection, metabolic disturbance)
- Exacerbation of chronic conditions
- Exacerbation of underlying psychiatric condition (eg. Bipolar disorder)
- Substance abuse

Triggers & Causes

- Infection
- Med toxicity
- Pain
- Fear
- Constipation
- Confusion
- Poor sleep
- Over/under-stimmulation
- Caregiver mismatch
- Routine change

BPSD Approach

- Understand baseline
- Identify triggers
  - Cohen Mansfield Agitation Inventory
  - Dementia Observation Scale
  - Behaviour Pattern Record
- Consider dementia differential

  (LBD/Alzheimer's/Vascular/FTD)

P.I.E.C.E.S. Approach

- Who has the problem? Practitioner? Caregiver? Patient?
- What is the degree of risk associated with the behavioural disturbance?
- What is the problem?
- What is causing the problem?

Cohen-Mansfield Agitation Inventory (CMAI)

Instructions: For each of the behaviors below, check the rating that indicates the average frequency of occurrence over the last 2 weeks.

Behavior	Never 1	Less Than Once a Week 2	Once or Twice a Week 3	Several Times a Week 4	Once or Twice a Day 5	Several Times a Day 6	Several Times an Hour 7
1. Hitting (including self)	❑	❑	❑	❑	❑	❑	❑
2. Kicking	❑	❑	❑	❑	❑	❑	❑
3. Grabbing onto people	❑	❑	❑	❑	❑	❑	❑
4. Pushing	❑	❑	❑	❑	❑	❑	❑
5. Throwing things	❑	❑	❑	❑	❑	❑	❑
6. Biting	❑	❑	❑	❑	❑	❑	❑
7. Scratching	❑	❑	❑	❑	❑	❑	❑
8. Spitting	❑	❑	❑	❑	❑	❑	❑
9. Hurt self or others	❑	❑	❑	❑	❑	❑	❑
10. Tearing things or destroying property	❑	❑	❑	❑	❑	❑	❑
11. Making physical sexual advances	❑	❑	❑	❑	❑	❑	❑
12. Paces, aimless wandering	❑	❑	❑	❑	❑	❑	❑
13. Inappropriate dress or disrobing	❑	❑	❑	❑	❑	❑	❑
14. Trying to get to a different place.	❑	❑	❑	❑	❑	❑	❑
15. Intentional falling	❑	❑	❑	❑	❑	❑	❑
16. Eating/drinking inappropriate substances	❑	❑	❑	❑	❑	❑	❑
17. Handling things inappropriately	❑	❑	❑	❑	❑	❑	❑
18. Hiding things	❑	❑	❑	❑	❑	❑	❑
19. Hoarding things	❑	❑	❑	❑	❑	❑	❑
20. Performing repetitious mannerisms	❑	❑	❑	❑	❑	❑	❑
21. General restlessness	❑	❑	❑	❑	❑	❑	❑
22. Screaming	❑	❑	❑	❑	❑	❑	❑
23. Making verbal sexual advances	❑	❑	❑	❑	❑	❑	❑
24. Cursing or verbal aggression	❑	❑	❑	❑	❑	❑	❑
25. Repetitive sentences or questions	❑	❑	❑	❑	❑	❑	❑
26. Strange noises (weird laughter or crying)	❑	❑	❑	❑	❑	❑	❑
27. Complaining	❑	❑	❑	❑	❑	❑	❑
28. Negativism	❑	❑	❑	❑	❑	❑	❑
29. Constant unwarranted request for attention or help	❑	❑	❑	❑	❑	❑	❑

PAINAD – Pain Assessment in Advanced Dementia scale

Items*	0	1	2	Score
Breathing independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation.	Noisy labored breathing. Long period of hyperventilation. Cheyne-Stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low-level speech with a negative or disapproving quality.	Repeated troubled calling out. Loud moaning or groaning. Crying.	
Facial expression	Smiling or inexpressive	Sad. Frightened. Frown.	Facial grimacing.	
Body language	Relaxed	Tense. Distressed pacing. Fidgeting.	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away. Striking out.	
Consolability	No need to console	Distracted or reassured by voice or touch.	Unable to console, distract or reassure.	
			Total¶:	

Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Interventions

Non-Pharma Interventions

- Best practice, 1st line treatment
- Know person's preferences
- Find practical solutions
  - Involve relatives in planning
  - Provide structure

BC Best Practice Guideline for Accommodating and Managing PSDS in Residential Care. 2012.

Table 1 - Categories for Specific Non-Pharmacologic Interventions for BPSD[9]

Sensory Enhancement/ Relaxation	Social Contact: Real or Simulated	Behaviour Therapy
• massage and touch • individualized music • white noise • controlled multisensory stimulation (Snoezelen) • art therapy • aroma therapy	• individualized social contact • pet therapy • 1:1 social interaction • simulated interactions/family videos	• differential reinforcement • stimulus Control
Structured Activities	**Environmental Modifications**	**Training and Development**
• recreational activities • outdoor walks • physical activities	• wandering areas natural/enhanced • environments • reduced stimulation • light therapy	• staff education (e.g.: CARE Program, P.I.E.C.E.S., proper communication) • staff support • training programs for family caregivers

BC Best Practice Guideline for Accommodating and Managing PSDS in Residential Care. 2012.
Kales, H.C. et al. Assessment and management of behavioural and psychological symptoms of dementia. BMJ. 2015.

Psychosocial interventions for management of behavioral and psychotic symptoms in patients with dementia

- Routine activity.
- Separate the person from what seems to be upsetting him or her.
- Assess for the presence of pain, constipation or other physical problem.
- Review medications, especially new medications.
- Travel with them to where they are in time.
- Don't disagree; respect the person's thoughts even if incorrect.
- Physical interaction: Maintain eye contact, get to their height level, and allow space.
- Speak slowly and calmly in a normal tone of voice. The person may not understand the words spoken, but he or she may pick up the tone of the voice behind the words and respond to that.
- Avoid point finger-pointing, scolding or threatening.
- Redirect the person to participate in an enjoyable activity or offer comfort food he or she may recognize and like.
- If you appear to be the cause of the problem, leave the room for a while.
- Validate that the person seems to be upset over something. Reassure the person that you want to help and that you love him or her.
- Avoid asking the person to do what appears to trigger an agitated or aggressive response.

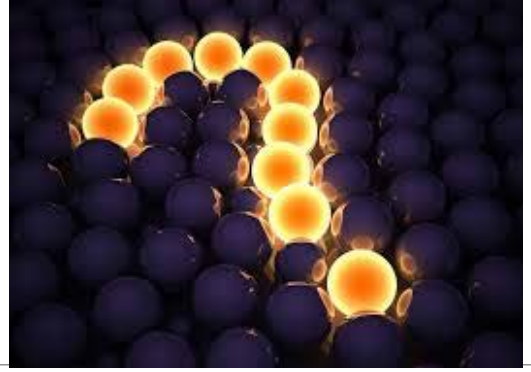
Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Patient Case

2 months later you receive report from staff that Mr. D has been agitated, wandering more, yelling out and eating non-food items. Unfortunately, Mr. D's tolerance for his co-patient's has diminished as well, and you receive nursing notes from the past week detailing nearly daily aggressive episodes, seemingly unprovoked.

Meds:

Gravol PRN	ramipril	morphine PRN
ranitidine	metformin	
oxazepam Qhs PRN	citalopram	



What behaviours are generally considered not modifiable by antipsychotics?

Which medications may be contributing to his presentation?

How will you respond to this communication?

Meds not indicated in:

Table 2- Examples of BPSD Usually not Amenable to Antipsychotic Treatment

• wandering	• vocally disruptive behaviour	• inappropriate voiding
• hiding and hoarding	• inappropriate dressing /undressing	• eating inedible objects
• repetitive activity	• tugging at seatbelts	• pushing wheel chair bound residents

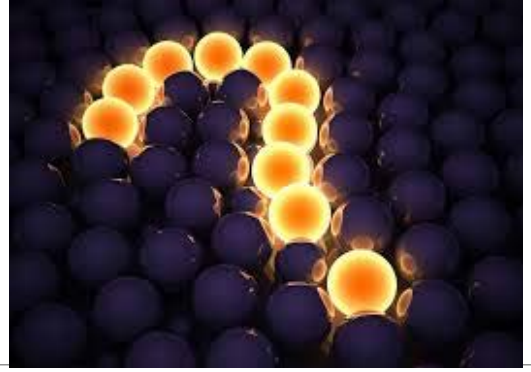
BC Best Practice Guideline for Accommodating and Managing PSDS in Residential Care. 2012.

Pharma Interventions

Patient Case

All environmental and non-pharm measures have been exhausted. The Director of Care has received numerous calls and emails from families of co-residents concerned for their loved one's safety around Mr. D. The aggression seems either unprovoked or at best sporadically associated with care.

You decide to initiate treatment with an antipsychotic.



Which one do you choose? Dose?

How will you track the effectiveness and for how long should you continue treatment?

Antipsychotics

Table 4 – Examples of Commonly Used Antipsychotic Dosages for the Elderly[14]

Medication	Starting Dose (mg)	Dosing Frequency	Incremental Dose (mg)	Average Total Daily Dose (mg)
quetiapine	12.5	bid/tid/HS (if XR)	12.5-25	150
risperidone	0.25	daily/bid	0.25	1
olanzapine	1.25	daily (HS)/bid	1.25-2.5	5
loxapine	2.5	bid/tid	2.5-5	25
haloperidol	0.25	daily/bid	0.25-0.5	2

Determining need for medication

Rule out other treatable underlying causes

Gather multiple data points

- Multiple patient visits
- Nursing report & notes
- Family collateral

Pharma Treatment

Caution recommended

Use only when

- risk of harm to self or others
- Symptoms are severe

Regularly review need – symptom severity & frequency, QoL, f(x)

- Start with one med, start low, go slow, monitor frequently for response and S/E

Medications

Antipsychotics

- Indicated for:
  - Aggression
  - Agitation
  - Psychotic symptoms
- Causing severe distress or immediate risk of harm

Antipsychotics

- Risperidone only approved one in Canada
- No data of benefit for typicals (some for Haldol)
- Olanzapine & risperidone – small to modest effect size
- No clear data for quetiapine, though often used
- Clinically used: Nozinan

BC Best Practice Guideline for Accommodating and Managing PSDS in Residential Care. 2012.
Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Avoid antipsychotics:

- In Parkinson's and Lewy Body dementia
  - Use Cholinesterase inhibitors
  - Quetiapine & clozapine in LBD, if must use
- If BPSD not causing distress
- Long term use

Patient Case

Mr. D has long ago lost capacity to consent to treatment. You call up his daughter who is listed as his health care representative and explain the situation. She is concerned about her father's aggression but is worried her dad will be "a zombie" on meds and she remembered hearing about a "black box" warning associated with antipsychotics.

How do you approach this discussion?

What kind of details will you share with Mr. D's daughter about the treatment plan and its risks?

When to consider an antipsychotic

Antips… for Res… ffective such as:

- Calling out, repetitive…
- Wandering, exit-see…
- Inappropriate elimina…
- Eating inedibles (soa…
- Interfering with other…
- Perseveration (clapp…
- Inappropriate dressi…

…cially inappropriate
…ing/hoarding items
…omnia
…tting
…ving
…geting
…vousness/restlessness

Cluster	Likely
 Psychosis	• Delusions • Hallucinations • Misidentification • Suspicious
 Aggression	• Defensive • Physical
 Agitation	• Restless/anxious

Adapted from BPSD Discussion Guide (2016) LTC 2nd ed.
http://www.albertahealthservices.ca/assets/about/scn/ahs-scn-srs-aua-fuss-notes.pdf

How much of a benefit?

SR and MA Maher et al (JAMA 2011)

Antipsychotics (mg/day) Duration	Aripiprazole 2-15mg, Olanzapine 1-15mg, Quetiapine 25-600, Risperidone 0.5-2.5mg 6-12 week follow-up
Outcomes	Total global score *Includes: Cumulative psychiatric symptoms of delusions, hallucinations, suspiciousness, dysphoria, anxiety, motor agitation, aggression, hostility, euphoria, disinhibition, irritability, apathy, and other behavioural disturbances
Effect sizes	"Small" = < 0.2 "Large"= > 0.5
Results	Effect size on total global score=0.12 to 0.20 **SMALL** improvement in global symptoms *did NOT include Quetiapine

Adverse effects

	Medication	↓BP	Ach	Sed	TD	EPS	Diabetes	↑Wt
Atypicals	Risperidone	++	++	++	++	+	++	+++
	Olanzapine	+	+++	+++	++	+	+++	+++
	Aripiprazole	+	+	++	+	+	-	+
	Quetiapine	++	+++	+++	+	+	+++	++
Typicals	Haloperidol	+	+	+	+++	+++	++	++
	Loxapine	++	++	+++	+++	+++	+	-

Adapted from BPSD Discussion Guide (2016) LTC 2nd ed.

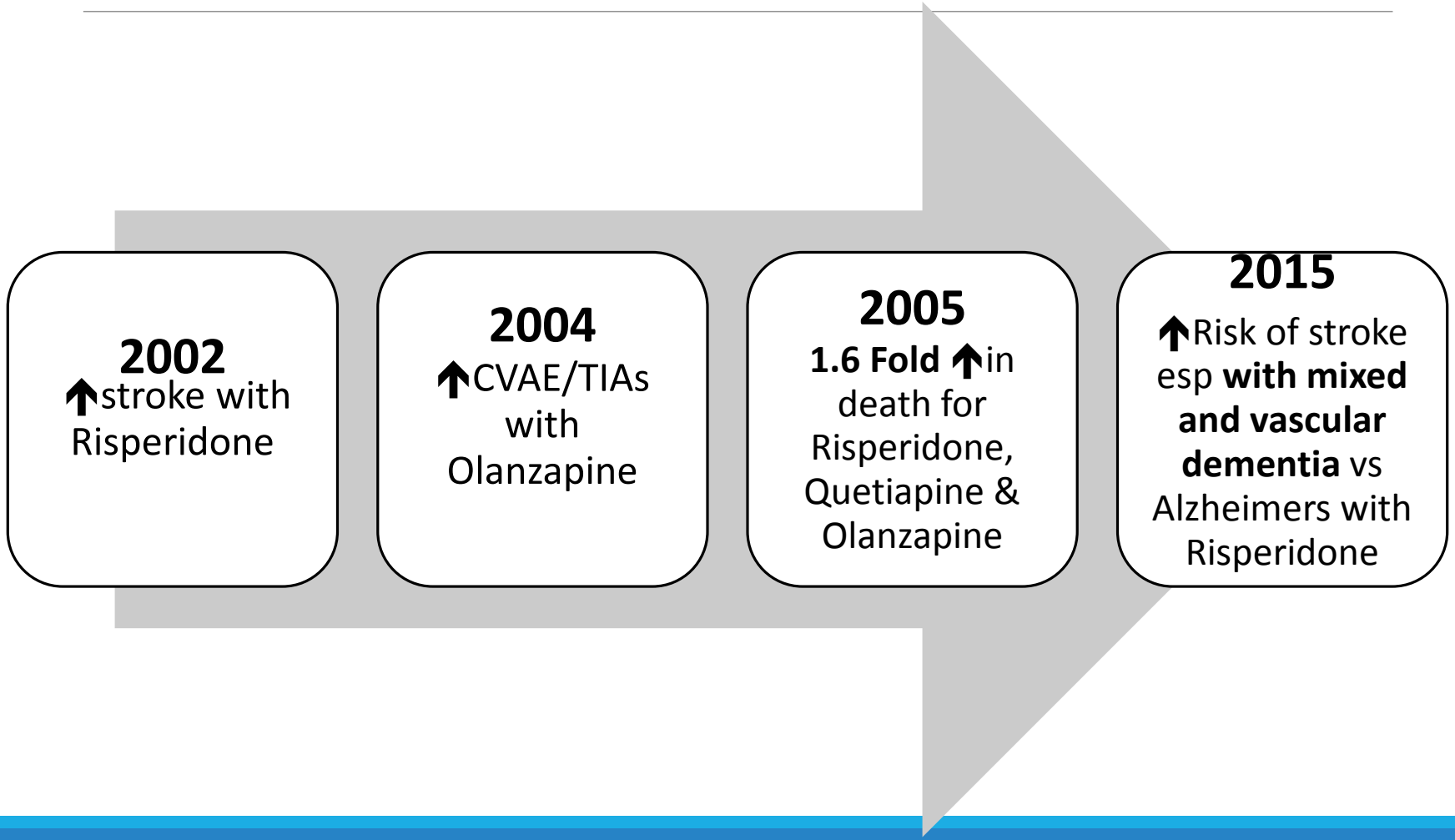
The Biggies

Health Canada

Warnings issued in 2002, 2004, 2005, 2015 of increased risk to elderly patients who take antipsychotics including:

- **Sudden cardiac death**
- **Stroke**
- **Infection (mostly pneumonia: 60% increased risk)**

Down memory lane



What is the absolute increase risk of death?

1 to 2%

JAMA (2005); 19; 294(15); 1923-43

Pathophysiology?

- Mechanism not established
- ?wt gain, hyperinsulinemia, DM=>↑CV risk
- ?reverse causality=>vascular dz disrupting frontal lobe=>to BPSD and CV events

What can increase mortality risk?

1nd generation APs **2nd gen highest risk**=Olanzapine, Risperidone	✓
Short and long term use *Within first 30-40d of treatment	✓
Higher dose	✓
Concurrent use with NSAIDS	✓

AmJ Psychiatry (2012); 169(1); 71-79
The Consultant Pharmacist (2015); 30(10); 599-611

Patient Case

Mr. D responds well to a titrated dose of Risperidone 0.375mg PO BID after ~2-3 weeks.

You routinely check for EPSE and ask staff to report any falls.

Extra Pyramidal Side-Effects

- Pseudoparkinsonism
  - Bradykinesia, flexed posture, ”chasing” gait, slow turn, postural instability
  - Hypomimia & hypophonia
  - Resting tremor
  - Rigid tone & cogwheeling
- Dystonia
  - Sustained abnormal posture, spasms (oculogyric crisis, laryngospasm, torticollis)
- Akathisia
  - In constant motion, subjective report of inner restlessness
- Tardiive Dyskinesia
  - Repetitive movements of face, torso or limbs
    - Grimacing, tongue protrusion, lip smacking & pursing, excessive eye blinking

Anti-Dementia Medications

- Evidence not robust but positive
- ChEIs well tolerated
- Additionally, improve cognition

- Rivastigmine – mixed evidence in DLB psychosis

Kales, H.C., et al. Assessment and management of behavioural and psychological symptoms of dementia. BMJ. 2015.
Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Antidepressants

- Citalopram & sertraline useful in agitation and psychosis
  - Avoid citalopram if risk of arrhythmia, long QTc, active heart disease
- Trazodone – no clear evidence for benefit, but few studies. Clinical experience has shown benefit
- TCAs – limited evidence of benefit, ++ S/E

Kales, H.C., et al. Assessment and management of behavioural and psychological symptoms of dementia. BMJ. 2015.
Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Avoid:

Benzos

- Limited evidence in dementia & bad S/E profile

- Limit use to short-acting forms and short-duration, anxiety-provoking events
  - Eg. Change of residence
  - Lorazepam, temazepam, oxazepam

Kales, H.C., et al. Assessment and management of behavioural and psychological symptoms of dementia. BMJ. 2015.
Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

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Medication Taper

Patient Case

Mr. D has reached a stage of his dementia where he can speak few intelligible words. He is starting to develop feeding difficulties with significant weight loss and has had a number of respiratory tract infections. Despite this, Mr. D's behavior has remained stable and you have not received any reports of recent aggression.

Should Mr. D remain on his antipsychotic?

When to Taper

- Lack of response despite dose titration
- After 3 months of behavioural stability
- Adverse effects
- Sometimes never:
  - Severe and persistent mental illness, failure of other interventions, more severe behaviours at baseline, >2 failed tapers
- If antipsychotics are continued-document decision with risk/benefits regularly

Declercq et al (2013)

BOTTOM LINE:

- Can be withdrawn from long-term APs w/out detrimental behaviour effects
- Uncertain re: benefits for cognition or QoL
- Pt's with more SEVERE NPS at baseline may benefit from continuing

Cochrane Database of Systematic Reviews (2013); 3; 1-82.

Mr. D

If you decide to initiate a taper, how would you do it?

How to Taper

~~Evidence~~

Guidance?

No tapering approach is superior

Ontario Deprescribing Guidelines for the Elderly

- ↓by 25% q 1-2weeks

BC Best Practice Guidelines

- ↓ by ¼ to ½ of the dose monthly

Tija et al (2015)

- PK parameters to d/c APs?

Medstopper.com

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Use of Antipsychotics in Behavioural and Psychological Symptoms of Dementia (BPSD) Discussion Guide: Long-term Care Edition (LTC) (2016); Accessed May 27, 2017 at https://thewellhealth.ca/wp-content/uploads/2016/05/UseofAntipsychotics_LTC2016-2.pdf

Appropriate use of antipsychopitcs in dementia. What is all the fuss? (2015); Accessed May 27, 2017 at http://www.albertahealthservices.ca/assets/about/scn/ahs-scn-srs-aua-fuss-notes.pdf

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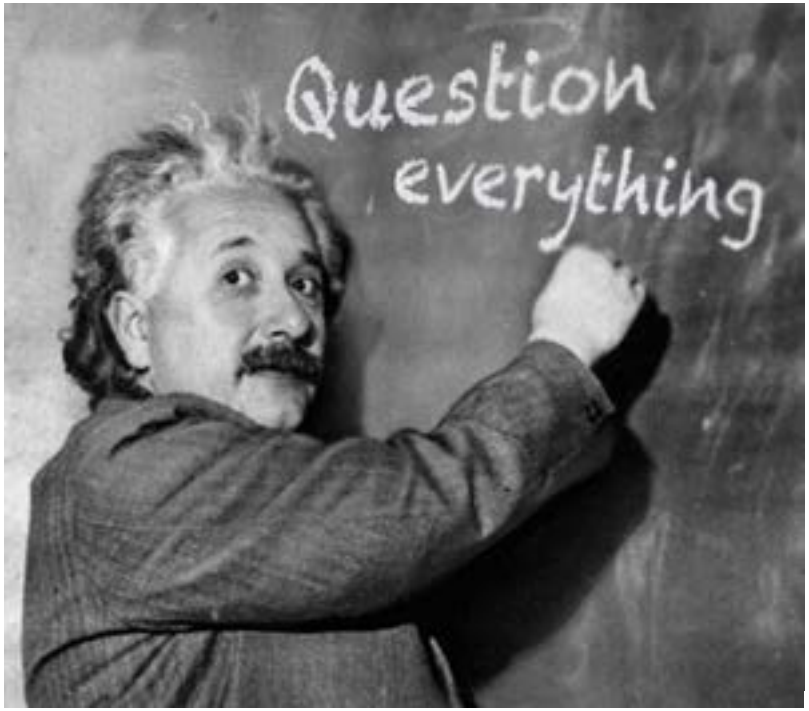
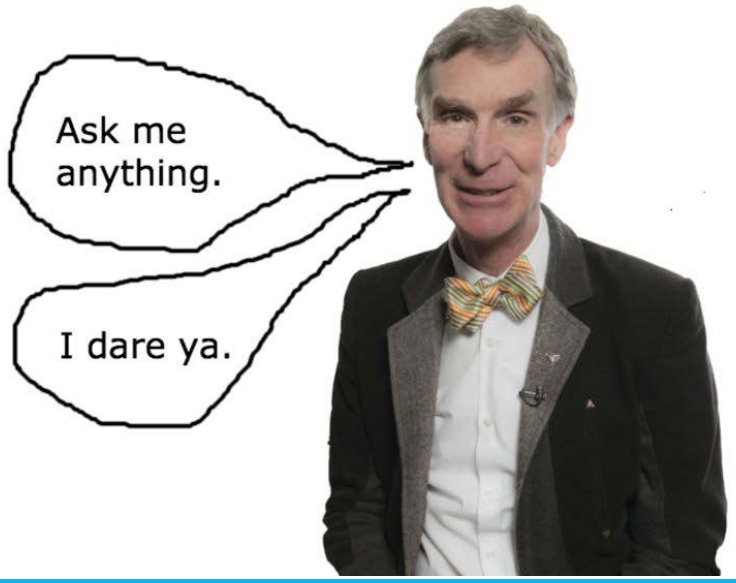

Question
everything


Ask me
anything.
I dare ya.

Restraints

- Use only rarely, if ever
  - Associated with:
    - Falls risk
    - Incontinence
    - Pressure ulcers

Sleep

Sleep disturbances in 25-35% of patients with AD

- Anxiety/depression
- Nocturia
- Meds (ChI – vivid dreams)
- Dementia pathophysiology

Non-pharma preferred

- Exercise/activity programs
- Increase natural light exposure in AM
- Limit evening beverages

Pharma

- Depends on sleep disturbance

Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Sexually Inappropriate Behaviour

- 15-20% of patients
- Behavioural interventions:
  - Redirection
  - Avoiding stimulants
- 1st line meds:
  - Antidepressants

- Hormonal agents have been used with anectdotal reports of efficacy, but due to S/E profile, not considered 1st line

Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.

Uncertain benefit

- Carbamazepine – some evidence of benefit but difficult side-effect profile, not recommended
- Gabapentin & Valproate – efficacy unproven
- Lamotrigine – case reports of benefit

Kales, H.C., et al. Assessment and management of behavioural and psychological symptoms of dementia. BMJ. 2015.
Management of neuropsychiatric symptoms of dementia. Jan 2017. UpToDate.