Pharmacotherapy of Dementia

"A Master's Course"

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Mitigating Potential Bias

Generic drug names will be used exclusively

Virtually all drugs discussed in this presentation have been genericised and are no longer actively marketed by the companies who originally marketed then

Learning Objectives

- To appreciate the pharmacological options available to treat dementia
- To develop treatment plans to treat agitation, aggression, psychosis, apathy, depression and disinhibited behaviours
- To recognize that specific dementias and comorbidities may require modifications to medication management

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Case 1

The Picky Lawyer

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Case 1

- 76 year old, retired lawyer, 2 year Hx of forgetfulness, asked to see re cognition
- No personal concerns, family worried
- No clear IADL impairment
- No NPS
- No previous psychiatric Hx
- No family Hx

Case 1

- Med Hx:
  - Recent unexplained weight loss (10 lbs/3 months)
  - DM with poor control; recently switched from oral hypoglycemics to insulin
  - HTN, hyperlipidemia
  - Meds: insulin, amlodipine, rosuvastatin
  - Previous pipe smoker
  - No alcohol
  - NKDA

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Case 1

- MSE
  - Pleasant, chatty, no insight
- Cognition
  - MMSE 29/30 (2/3 DR)
  - MoCA 24/30 (Trails, 0/5 DR)
- PE
  - No EPS, BP 185/95
- MRI
  - Generalized atrophy, severe confluent periventricular white matter changes

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Case 1

- Diagnosis?
- Treatment?

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Case 1; Year 2

- Family worried
- Misplacing items, made mistakes on taxes, drove through a stop-sign
- O/E
  - Pleasant , cheerful, chatty, no insight
  - MMSE 26/30 (date, 0/3 DR)
  - MoCA 20/30

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Case 1; Year 2

- Diagnosis?
- Treatment?

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Case 1; Year 3

- Family – much worse cognitively
- Now attends day program as “volunteer” but getting into arguments with patients
- Picking at scalp
- O/E
  - Pleasant, cheerful, chatty, no insight
  - MMSE 23/30
  - MoCA 18/30

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Case 1; Year 3

- Diagnosis?
- Treatment?

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Case 1: VCI, VaD, NPS

Summary

- VCIND – no pharmacotherapy
- VaD - ChEIs, memantine
- Treatment of irritability, compulsive behaviors
  - ChEIs?
  - Memantine?
  - SSRIs?
  - Trazodone?

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Case 2

“She was here a minute ago….”

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Case 2

- 82 year old male, recently widowed, referred for cognitive assessment
- Family notes concerns about STM, not looking after himself well (cooking, grooming, medication)
- Believes dead wife comes to visit daily
- Visited UofT to check on her, called police for help

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Case 2

- Hx of anxiety treated by FP 10 years earlier
- No family Hx
- Med Hx: sinus bradycardia (Holter: lowest HR 43 BPM), hypothyroidism
- Meds: l-thyroxine
- Non smoker, no alcohol
- NKDA

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Case 2

- O/E
  - Calm, pleasant, withdrawn, perplexed, denies depression, anxiety
  - Definite visual hallucinations, variable insight
- P/E
  - Mild bradykinesia, no tremor, mild cogwheeling with activiation

Case 2

- Cognition
  - MMSE 28/30 (2/3 DR, copy)
  - MoCA 23/30 (Trails, clock, WLG, 2/5 DR)
- MRI
  - Mild atrophy
- SPECT
  - Mild bilat parieto-occipital hypoperfusion

Case 2

- Diagnosis?
- Treatment?

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Case 2; DLB with Psychosis

Summary

- ChEIs!
- But – what to do when bradycardia ties your hands?
- Memantine?
- Antipsychotics?
- SSRIs?

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Case 3

The Sad Sweet-Tooth

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Case 3

- 78 year old married female, referred for cognitive assessment and depression
- 4-5 year Hx of progressive cognitive decline, no longer able to cook
- Family Hx of mother who died with AD in a nursing home
- No interest in activities, going out, participating in conversations
- Sleeps well (too much)
- Poor appetite (except for sweets)

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Case 3

- Med Hx
  - HTN, breast ca, OP, OA
  - Meds: valsartan, risedronate, acetaminophen
  - Non smoker, no alcohol, NKDA
- P/E
  - WNL
- MRI
  - Mild microangiopathic changes, severe medial temporal atrophy

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Case 3

- O/E
  - Withdrawn, flat, psychomotor retarded, bradyphrenia
  - Denies depression, anhedonia, S/I
  - Subj: sleep, appetite, energy normal
  - No psychosis
- Cognition
  - MMSE 18/30
  - MoCA 12/30

Case 3

- Diagnosis?
- Treatment?

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Case 3; AD and Apathy

Summary

- Differentiation with depression
- ChEIs!
- Role of SSRIs?
- Bupropion?
- Psychostimulants/methylphenidate

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Case 4

"You gotta know when to hold 'em and know when to fold 'em"

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Case 4

- 92 year old male, nursing home resident with severe dementia. Referred to comment on psychotropic meds (family request)
- 10 year Hx of decline, called AD, in NH last 4 years
- Initially required antipsychotic treatment for severe agitation and aggression with care
- Mildly resistive but manageble

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Case 4

- Med Hx
  - OA, knee replacement, cataracts, MD, HTN, DM, hyperlipidemia
  - Meds: donepezil 10mg, memantine 20mg, risperidone 1mg (and 0.5 prn), atenolol, metformin, atorvastatin

Case 4

- O/E
  - In wheel chair, calm, no spontaneous speech, occasionally responds to questions
  - Denies depression, anxiety, fears, somatic complaints
  - Feeds himself, immobile, incontinent x 2
  - PE – mild tremor, moderate cogwheeling, paratonia, myoclonus
  - MMSE – 3/30

Case 4

- Diagnosis?
- Treatment?

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Case 4; Severe Dementia

Summary

- Deprescribing
  - Antipsychotics
  - ChEIs
  - Memantine
  - Beers Drugs

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Case 5

“Silly and Saucy”

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Case 5

- 66 year old female referred for cognitive assessment and bizarre behavior
- Retired abruptly, unexpectedly from senior administrative position 5 years ago
- 2 year Hx of “overly-friendly” behavior with children
- “Silly jokes”
- Over-eats, sloppy eater, significant weight gain
- 1 recent “close call” in the car

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Case 5

- Fam Hx – mother institutionalized in her 50s, much older sister with dementia
- No medical Hx, no meds
- Smoked in her teens, drank daily until retirement

Case 5

- O/E
  - Overly familiar, mildly disinhibited, inappropriately cheerful
  - Denies depression, worries, S/I
  - No psychosis
- Cognition
  - MMSE 28/30 (1/3 DR)
  - MoCA 21/30 (Trails, clock, attention, concentration, similarities, WLG, 2/5 DR)

Case 5

- MRI
  - Asymmetric atrophy, right frontal and anterior temporal lobes
- SPECT
  - Moderate-severe hypoperfusion right frontal and anterior temporal, mild on left

Case 5

- Diagnosis?
- Treatment?

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Case 5; FTD and NPS

Summary

- ? role of ChEIs
- ? Role of memantine
- SSRIs
- Trazodone
- ? antipsychotics

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Case 6

My worst (current) nightmare

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Case 6

- 70 year old female, referred for management of severe NPS
- 5 year Hx of rapidly progressive cognitive and functional decline
- Diagnosed with Posterior Cortical Atrophy, severe dementia, treated with donepezil, memantine
- Perseverative screaming, crying, wanders, agitation, aggression (recently discharged from day program)

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Case 6

- Family Hx – father with dementia
- Medical Hx – severe OP, vertebral compression fractures
- Meds: alendronate, acetaminophen, escitalopram 20mg, quetiapine 100mg hs and 25mg prn BID

Case 6

- O/E
  - Agitated, shouting loudly, won't sit down, no verbal responses, doesn't respond to simple commands, occasional brief "crying spells", strikes out at daughter when redirected
  - P/E – no EPS

Case 6

- Diagnosis?
- Treatment?

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Case 6; Severe Dementia, Severe NPS

Summary

- Start from scratch
- Try monotherapy first
- Decide on target symptoms
  - ? Pseudobulbar affect
  - ? Pain
- ? Switch ADs, switch APs
- ? Narcotic analgesics
- ? Cannabinoids
- ? DM/quinidine
- Never aim for perfection!

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