Topic	Initial Management		
CPD	Self-Reporting Teaching	**Hours**	EA 4 hours (1.5 hours webinar & 1-hour self-directed learning)
Date	To be completed August/September/October 2023		
Aim	To assist GPR Supervisors to		
Learning Outcome	Outline the pharmacological tools which may assist in the management of dementia		

Background

PART 1 - BACKGROUND

Ruby is a 91yr old lady who presents to her GP with a two-year history of progressive cognitive decline. Her symptoms include poor speech, difficulty formulating sentences. She is struggling with the ability to write. Whilst she is still able to read, she is struggling to remember the plot. She lives alone, she has been able to make simple meals but is finding this increasingly difficult. She can manage her ADL's without much difficulty but is struggling with more complex tasks, such as using gardening equipment. Ruby has been experiencing some symptoms of low mood, and anxiety.

PMH – hypothyroidism, osteoarthritis, insomnia

Her current medication includes – levothyroxine, mirtazapine, NSAID

She has two daughters who live close by, who can support a couple of days a week but have their own caring responsibilities in terms of grandchildren.

After further review of Ruby, including a collateral history from her daughters, appropriate investigations and excluding other reasons for cognitive decline, you make a diagnosis of Dementia, most likely Alzheimer's.

Instructions

Before completing the activities below with your registrar, you will have attended a Dementia Training Australia Demystifying Dementia session via webinar.

Reflect on the knowledge gained from your learning prior to engaging in the following activities.

Question 1 - Pharmacological Management

a. Outline the principals when reviewing medication with a diagnosis of Dementia.

~~b.~~ You have decided to perform a medication review on Ruby: What would you consider in this case?

c. List the medications that have common anti-cholinergic effects (consider over the counter as well as PBS)

d. Is there any benefit to Ruby starting donepezil? What are the contra-indications or side effects to warn Ruby about with regards to this medication.

Feedback

Feedback

(a)

The principals of pharmacology review with a Dementia diagnosis include

1. Collating a list of all prescribed and OTC medications
2. Assessing ability to remember and take medication
3. Assessing necessity of each tablet and consideration of de-prescribing or substitution
4. Consideration of anti-cholinergic properties of each medication
5. Consideration of alcohol and other drug use (as appropriate per case)

(b)

1. Is she taking any other OTC medication?
2. Is Ruby remembering to take her medications? Are they in blister packs? Can she open blister packs? Often medications are difficult to remember, and people living with dementia and cognitive disorders may need to use Dosette boxes, Webster packs or reminders to help with this. Dementia Australia have a fact sheet on assistive devices that may be helpful for families: How supporting aids can help
3. Consideration of whether Ruby can cease or change medications is important. In this case we presume she is using the Mirtazapine for insomnia. Excessive somnolence in the morning maybe contributing towards decreased cognition. Consider if Mirtazapine needs to be ceased and/or replaced with something that has less risk, such as Melatonin. Reviewing her NSAID and possibly replacing with Panadol. Checking her TSH and kidney function will have already been completed as part of your initial investigations.
4. Mirtazapine has some anticholinergic activity and should be used with caution (and also may have other effects on cognition, as described above). NSAIDs may have very mild anti-cholinergic effects but should be avoided in the elderly for other reasons such as bleeding risk.
5. Ask for a history of past or present alcohol and other drug use.

(c)

There are many medications that can cause anti-cholinergic effect. Some are more powerful than others. Using multiple drugs with anti-cholinergic properties increases the anti-cholinergic load on the patient's brain. The ability to withstand anti-cholinergic affect will party depend on the patient's cognitive reserve - the background level of cognitive function for each patient.

Below is one list of commonly used medications with anti-cholinergic properties.

Feedback

ACUTE	CHANGE	IN	M(ental) S(tate)
Antiparkinsonian **C**orticosteroids **U**rologic (antispasmodics)[1] Theophylline **E**mesis (antiemetics)	**C**ardiac (antiarrhythmics) **H**2 blockers (cimetidine) **A**nticholinergics **N**SAIDs **G**eropsychotropic **E**toh	**I**nsomnia medications **N**arcotics	**M**uscle relaxants **S**eizure medications

[1]**U**rologic (antispasmodics) such as oxybutynin or tolterodine

[2]**G**eropsychotropic medications (such as antidepressants, antipsychotics, sedatives)

Anticholinergic drugs and dementia

Anticholinergic and sedative medicines

(d)

The benefits of Cholinesterase inhibitors such as Donepezil is difficult to predict. Potential benefits may include help with focus and attention. The benefits are likely to be modest and medication should not replace other evidence based nonpharmacological treatments. Cholinesterase inhibitors have a pbs listing for Alzheimer's Dementia. In Ruby's case, the potential benefits and risks will need to be discussed with Ruby and her family and trial maybe started if there is consent and no contraindications.

Absolute contraindications include:

- severe asthma/COPD
- previous upper GI ulcer
- conduction abnormalities

Common side effects include headaches, nausea and dizziness - these may cease after a few weeks but need to be monitored. Start with 5 mg and review to increase dose to 10 mg after two months.

Dementia Australia has a useful help sheet:

Drug treatments for Alzheimer's disease: Cholinesterase inhibitors

Question 2 - Social and Psychological

a. Thinking about a strengths-based approach, how would you work with Ruby and her family to maintain her skills? Illustrate your thoughts using the domains and stages framework.

b. You decide to use a GPMP to arrange some support for Ruby, which allied health professionals might you involve in her GPMP?

Feedback

(a)
Ruby may benefit from support in terms of Occupational therapist, it might be possible to look at the skills she already has and improve or maintain these through methods such as COPE – care of the older person in their environment. Sometimes OT can assist in helping people declutter their environment, identify activities that can hold meaning and improve mood and interaction.
My Aged Care referral would be beneficial to assist in access to these services.
Ruby may also benefit from social support visits or attendance at local council groups.
Using your local Health Pathways Dementia – pathway may assist in finding these groups locally.
A referral to Dementia Australia would assist in finding local support groups for Ruby.

(b)
Ruby may benefit from a physio or exercise physiotherapist to ensure that she maintains her mobility and reduces the risk of frailty. Ensure her vision and hearing have had a recent check as both are important in maintaining function and safety.

Question 3 – Legal

a. What other important legal documents could you institute at this stage? What would be the important points to raise with Ruby and her daughters with regard to these documents?

Feedback

It is important to discuss with Ruby whether she has an advanced care directive or active power of attorney. If these documents are available, it is important to talk to Ruby about what they mean and check her understanding.

If she doesn't have the documents, it may be important to suggest that the family review if she would like to make some recommendations. At this point it is important to assess capacity for making decisions.

Capacity for making decisions is decision specific so in this case, you would be assessing whether Ruby understood and ACD and POA and could do the following in regard to these documents. If you did not feel able to make that decision it would be reasonable to ask a geriatrician to assist in this matter.

Generally, a person with capacity will be able to:

- understand the facts of the situation
- understand the main choices available
- weigh up those choices, including benefits and risks
- make and communicate the decision[2]
- understand the ramifications of the decision.

Test for medical capacity: What GPs need to know

Question 4

a. What screening questions could you ask to assess Ruby's mood?

b. Ruby has some symptoms of low mood, what would be your next steps?

Feedback

The geriatric depression scale is a useful and validated tool for assessment of mood in the person over the age of 65. Geriatric Depression Scale (Short Form)

If Ruby has symptoms of depression and scores above 7 on the geriatric depression scale a referral to a psychologist with an interest in aged care and dementia should be offered. Depression may be reactive to the Dementia, or it maybe pre-existing. Many symptoms of depression such as apathy and withdrawal can overlap with symptoms of the Dementia.
You may wish to start antidepressants – first line anti-depressants are Sertraline or Citalopram. The benefits and risks need to be assessed carefully and monitored. Seek specialist opinion if you are unsure or you or the family would like a second opinion.

References

https://dta.com.au/general-practitioners/