

# Information Regarding Medications for Dementia

## 1. Introduction

There are 4 medications: The first medication usually started in dementia is 1 of 3 drugs in the same category called Cholinesterase Inhibitors (CIs); Aricept or Donepezil (Generic), Reminyl or Galantamine (Generic) and Exelon or Rivastigmine (Generic). These drugs increase the level of a brain neurotransmitter (Acetylcholine) which is decreased by  $\geq 70\%$  by the time dementia is diagnosed. The 4<sup>th</sup> drug, Ebixa or Memantine (Generic) is generally added on later in the course of dementia typically in the moderate stage when personal activities (dressing, toileting, grooming) are beginning to be affected (the CI should **NOT** be stopped or the patient could worsen).

## 2. Cholinesterase Inhibitors (CIs)

These drugs do not cure dementia but help symptoms, they can help:

- Memory/problems with thinking/organizing/reasoning
- Improve attention/alertness/being “tuned in”
- Delay further functional disabilities (finances, cooking, shopping) etc.
- Improve or delay behaviour issues (anxiety, agitation, apathy etc)
- Reduce caregiver load/help needed by an average 1 hour per day



There are over 20 high level scientific trials (randomized controlled trials) showing benefit with these drugs in cognition/function/behaviour

Trials have shown benefits in many types of Dementia

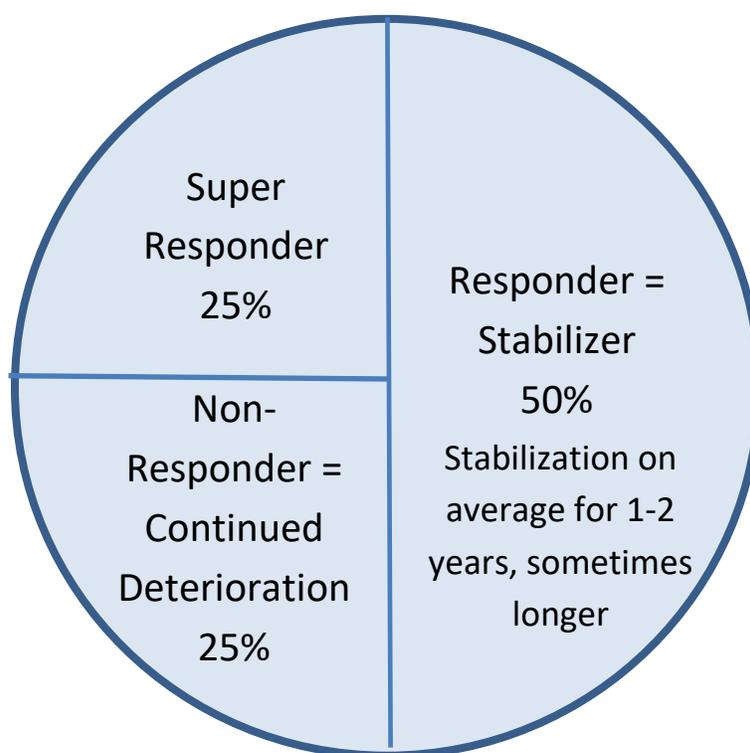
- Alzheimer
- Vascular (stroke)
- Lewy Body
- Mixed Alzheimer/Vascular

No benefit has been shown in FrontoTemporal Dementia.

The Standard of Care (Canadian Consensus Conference on Dementia) is that everyone should get a trial with one CI and if not tolerated or not effective then a trial with a 2<sup>nd</sup> CI.

### 3. Benefits of CI Therapy

- 25% (1 in 4) are Super Responders with a clear and obvious IMPROVEMENT.
- 50% (1 in 2) are Stabilizers either the same or slightly better versus the expected deterioration in 3 months in untreated dementia.
- Unfortunately, 25% (1 in 4) continue to deteriorate, in which case the first CI is stopped and a 2<sup>nd</sup> CI should be trialed for 3 months.



**Remember:** “Staying the same” is a good outcome in a disease like dementia which progressively worsens over time.

Dosing	Starting Dose	Minimal Effective Dose	Usual Dose
Donepezil (Aricept)	5 mgm	5 mgm	10 mgm
Galantamine (Reminyl)	8 mgm	16 mgm	16-24 mgm
Rivastigmine (Exelon) Patch	5	5	5-10

#### 4. What about Side Effects?

Generally, CI drugs are safe and well tolerated. 90% get absolutely NO side effects. The only common side effects (10%) are gastrointestinal: nausea, diarrhea, vomiting, bloating usually seen in the FIRST week of starting CI therapy or after 4 weeks when the CI dose can be increased.

Take the medication AFTER BREAKFAST (15-30 minutes) which minimizes nausea.

- a) If the side effects are severe, stop the medication and call the Day Hospital Nurse (generally we would wait a week and then start a 2<sup>nd</sup> CI because often side effects are seen with one CI but not another).
- b) If the side effects are NOT severe, try to hang on for a few days as side effects disappear within 48 hours in 50% of persons. If they are not settling down, call the Day Hospital Nurse.
- c) All other side effects occur in less than 1% of persons (muscle cramps, fatigue, insomnia, runny nose/eyes), but if something new starts up in the 1<sup>st</sup> week of starting a CI drug or increasing the dose of a CI drug, please call the Day Hospital Nurse to discuss)
- d) A rare side effect (1 in 2,000 persons) is a slow heart rate which if it occurs is associated with symptoms of feeling faint or having a faint → go to your local Emergency Room if you have these symptoms.

#### 5. Follow up

The benefits (improvement or stabilization) of CI therapy should be assessed after 3-4 months of therapy (in studies = the time of maximal benefit). Generally follow up means asking the patient and family to compare versus pretreatment status (same, better or worse) and repeating the pretreatment cognitive testing (MoCA = Montreal Cognitive Assessment OR MMSE = Mini Mental State Exam).

- If a patient is a responder to a CI drug then they should stay on it **FOR LIFE**. Stopping the CI will result in immediate deterioration (within 2 weeks) to where the person would have been without the CI drug.
- Deterioration in dementia is not because the CI drug is **NOT** working, it is because the dementia is progressing. With dementia deterioration, a 2<sup>nd</sup> drug Ebixa (Memantine) can be added (the CI is **NOT** stopped).
- The patient should be formally reassessed at least every 12 months

## 6. Memantine/Ebixa Therapy

Memantine (trade name Ebixa) is generally added to CI therapy when:

- A. Objective memory testing **WORSENS**: either the MoCA (Montreal Cognitive Assessment) falls below 12/30 or the MMSE (Mini Mental State Exam) falls below 16/30 OR...
- B. There starts to be any issues with personal care abilities: dressing, grooming, hygiene).

Memantine regulates the activity of a different neurotransmitter (glutamate) and can improve/stabilize cognition, function and behaviour.

Memantine is started at a low dose (5 mgm daily) to minimize side effects and increased by 5 mgm per week to the eventual dosage of 10 mgm twice a day for a 3 month trial.

### Side Effects

The two most important side effects are:

- a. Acute agitation (5%) and
- b. Acute confusion (5%).

Many times these symptoms will “settle down”. If there is no significant improvement within 24-48 hours, stop the memantine and notify the Day Hospital Nurse. Other side effects include headache, dizziness, fatigue, poor balance and constipation.

### What about Vitamins/ Naturopathic Products

Although there are many reports on the internet and public press, there is no evidence AT ALL for these products.

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