

EDUCATION GRAM™
Recommendations For The Treatment Of Alzheimer's Disease (AD)
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Tests for Alzheimer's Disease and Dementia

The diagnosis of Alzheimer's disease (AD) is made through a complete assessment that considers all possible causes. Of the tests involved include a medical history, physical exam, neurological exam, mental status tests, brain imaging and genetic testing.

Medical History	Current and past illnesses, any medications the patient is taking and medical conditions affecting other family members (AD or related dementias)
Physical Exam	Diet, nutrition and use of alcohol Review all medications Check blood pressure, temperature, pulse, heart, lungs, blood/urine samples
Neurological Exam	Test reflexes, coordination, muscle tone/strength, eye movement, speech and sensation
Mental Status Tests	<ul style="list-style-type: none"> • Mini-Mental State Exam (MMSE): Score of 20 to 24 (mild dementia), 13 to 20 (moderate dementia) and <12 (severe dementia) • Mini-Cog: Score of 3 recalled words (negative for cognitive impairment), 1-2 recalled words + normal CDT (negative), 1-2 recalled words + abnormal CDT (positive) and 0 recalled words (positive) • Mood Assessment
Brain Imaging	Structural imaging with MRI or CT to rule out other conditions
Genetic Testing	Routine genetic testing not currently recommended for AD <ul style="list-style-type: none"> • APOE-e4 (risk gene) and ADAD (deterministic gene)

Treatment Options: Current medications cannot cure AD or stop its progression, thus the goal of treatment is to help lessen the symptoms of memory loss and confusion. Recommend a cholinesterase inhibitor for patients with mild to moderate AD. Consider patient's tolerance and price when choosing amongst Donepezil, Galantamine and Rivastigmine.

Mild to moderate:	1) Donepezil 2) Galantamine or Rivastigmine	Moderate to severe:	1) Donepezil 2) Donepezil + Memantine 3) Memantine
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Medication	Dose (Initial)	Notes	Cost*
Donepezil (Aricept)	Mild to moderate: 5 mg PO once daily	<ul style="list-style-type: none"> • May cause dose-related diarrhea, nausea, and vomiting (resolves in 1-3 weeks) • Monitor mental status, weight, GI tolerance, and GI bleeding • May be taken with or without food (absorption not affected) 	\$13
	Moderate to severe: 5 mg PO once daily		
Galantamine (Razadyne)	Mild to moderate: 4 mg PO twice daily with food	<ul style="list-style-type: none"> • Efficacy similar to Donepezil, but more GI side effects • Increase dose after a minimum of 4 weeks. If patient cannot tolerate consider switching agent 	\$183
Rivastigmine (Exelon)	Mild to moderate: 1.5 mg PO twice daily with food		\$242
Memantine (Namenda)	Moderate to severe: 5 mg PO once daily (immediate-release tab)	<ul style="list-style-type: none"> • Little evidence of benefit for mild AD • May have benefit when combined with cholinesterase inhibitor • Dizziness is the most common side effect 	\$29

*Pricing is based on the lowest AWP Unit Price of all generic formulations available for a 30 day supply.

References

1. Alzheimer's Association. Alzheimer's Disease . http://alz.org/alzheimers_disease_1973.asp (accessed 2016 Jan 19).
2. Press D, Alexander M. Cholinesterase inhibitors in the treatment of dementia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2015.
3. Press D, Alexander M. Treatment of dementia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2015.
4. Red Book Online. Micromedex. www.micromedexsolutions.com (accessed 2016 Jan 19).
5. Aricept [package insert]. Woodcliff Lake, NJ: Eisai Inc; 2015.
6. Razadyne [package insert]. Titusville, NJ: Janssen Pharmaceuticals, Inc. 2013
7. Exelon [package insert]. East Hanover, NJ: Novartis. 2013