

Alzheimer's SOS – Medications



Thirty-some years ago, there was little to offer a patient with Alzheimer's disease other than sympathy.

As a social worker, Janet could give behavior tips, caregiver support, and the names of nursing homes that had dementia units. But as a physician, I had virtually nothing to treat this devastating disease. We used medications like papaverine which supposedly improved circulation to the brain, vitamin E, and Ginkgo biloba. We even tried antibiotics, anti-inflammatory medicines like ibuprofen, and a variety of herbs and supplements.

Then in the early 1990s, researchers honed-in on a brain chemical called acetylcholine that was crucial for memory and was found to be decreased in brains of patients with Alzheimer's disease. Attempts to create an acetylcholine “pill” weren’t successful. So the goal was then to stop the enzymes which break down acetylcholine and the acetylcholinesterase inhibitors (AChEIs) were born.

The first was tacrine (Cognex). It was taken four times a day and frequently caused liver damage. But patients, families, and doctors were desperate for help and it was prescribed regularly. Soon, safer and more effective AChEIs were developed.

I call the current AChEIs *the three sisters* because they have similar effects and side effects. These are Donepezil (Aricept), galantamine (Razadyne) and rivastigmine (Exelon) and are considered the best first-line therapy option for mild to moderate Alzheimer's disease.

Although most people do just fine on these medications, there are some serious potential side effects including heart rhythm abnormalities, vomiting, diarrhea, and headache. Donepezil is also known to worsen leg cramps and nightmares. Sometimes we have to try a couple of different AChEI’s to find the best match.

Another brain chemical called glutamate is thought to contribute to Alzheimer's disease by causing overstimulation of certain neurons (brain cells). The medication memantine (Namenda) was developed to decrease the over activity by blocking some of the connecting channels, allowing a more controlled flow of information between neurons.

I've been very impressed with this medication, not only because of its effect on memory, focus and concentration, but also because of its usefulness for calming some of the difficult behaviors experienced by patients with Alzheimer's disease such as sundowning, agitation, and even combativeness.

Side effects include headache, fatigue, diarrhea, and elevated blood pressure, but overall it seems to be well tolerated. The ideal is to use *both* an AChEI and memantine.

I do stress that patients with Alzheimer's disease deserve to be started on medications. Early treatment keeps people more functional and independent for a longer period of time. It is very rare that I will recommend against starting one of these medicines for a patient. Generally, it is only when I feel that the risk of side effects would greatly outweigh the benefit.

Unfortunately, some families were wrongly informed that these medications would not be helpful or that the effects were temporary. In other cases, families stopped the medicine after a few months because they didn't see an improvement. But just like any other medication for chronic illness, the goal is to prevent the devastating effects of unchecked disease.

Although psychosis, hallucinations, and agitation can be part of Alzheimer's disease, our most difficult cases have been in patients who were not treated until the brain damage was so severe that they were totally out of control.

Every day, I send up a prayer of thanksgiving that we have medications to treat Alzheimer's disease.

Dr. Tronetti has no financial incentives or connections to any pharmaceutical company. Her opinions are based on her personal and professional experience.