



Drugs and Dementia

Currently there are no drugs which reverse or cure the brain damage caused by Alzheimer's disease or other forms of dementia. There are however several drugs that are said to improve or preserve memory, attention span and thinking ability which are available for use in the management of Alzheimer's disease, the most common cause of dementia.

Exelon, Aricept & Reminyl

Exelon (*Rivastigmine Hydrogen Tartrate*), Aricept (*Donepezil Hydrochloride*) and Reminyl (*Galantamine Hydrobromide*) each work to restore a chemical called acetylcholine (pronounced a-set-tile-koleen) in the brain. Acetylcholine plays an important role in many brain

functions. It carries messages from one nerve cell to another in the brain. The progressive destruction of acetylcholine in the brain accounts for many of the symptoms of dementia caused by Alzheimer's disease.

An enzyme called acetylcholinesterase lowers the amount of acetylcholine in the brain. Exelon, Aricept and Reminyl all block the action of this enzyme, thereby temporarily improving or stabilizing the symptoms of Alzheimer's disease.

Exelon, Aricept and Reminyl are only recommended for use in dementia due to Alzheimer's disease. The benefit gained from use of these drugs is modest at best, and they can only be used in the early to middle stages of

Chemical Name	Brand Name	Dosage	Side Effects
Donepezil Hydrochloride	Aricept	<ul style="list-style-type: none"> Available in 5mg or 10mg tablets Taken once per day with or without food 	<p>ALL drugs have side effects. Side effects will depend on the type and dose of medication. Common side effects with these three drugs include:</p> <ul style="list-style-type: none"> Diarrhoea Nausea Vomiting Insomnia Muscle cramps Loss of appetite Fatigue Dizziness Nightmares <p><i>Please discuss possible side effects and drug interactions with your doctor.</i></p>
Rivastigmine Hydrogen Tartrate	Exelon	<ul style="list-style-type: none"> Taken twice a day, usually morning and night Dose gradually increased from 1.5mg twice a day to a maximum of 6 mg twice a day 	
Galantamine Hydrobromide	Reminyl	<ul style="list-style-type: none"> Available in 4, 8, and 12mg tablets Taken twice a day, morning and night with food. Usual maintenance dose is 8mg twice a day. A sustained release form requiring once daily dosage now available 	
Aricept, Exelon and Reminyl are all listed on the Pharmaceutical Benefits Scheme.			

Alzheimer's disease. People with early to middle stage Alzheimer's disease who take one of these medications may find an improvement in the ability to think clearly, their level of functioning and behaviour.

Ebixa

Ebixa (*Memantine Hydrochloride*) is a drug that is available for people in the middle to later stages of Alzheimer's disease. It works in a different way to Aricept, Exelon and Reminyl. People with Alzheimer's disease have increased levels of a chemical called Glutamate. Glutamate causes an influx of calcium into brain cells, resulting in cell damage. Ebixa blocks Glutamate, thus preventing this extra calcium from entering and damaging brain cells.

Ebixa cannot cure or reverse Alzheimer's disease and it does not benefit all who take it. For some people it may improve thinking, functioning and behaviour for a period of time. However benefits vary between individuals and are modest at best. Like any medication, Ebixa may have side effects. These can include dizziness, headache, confusion, stomach upset and diarrhoea.

Ebixa is available in two forms: as 10mg tablets or as a liquid. Ebixa is taken once daily with or without food. Initial dosage of 5mg is gradually increased to a maintenance dose of 10mg per day.

Ebixa is not currently listed on the Pharmaceutical Benefits Scheme, making it prohibitively expensive for many people.

Questions to ask your doctor

- What are the likely benefits of taking this drug?
- How long before improvement is noted?
- What are the likely side effects?
- What should I do if side effects occur?
- What should I do if I miss a dose?
- If the drug is stopped suddenly, what happens?
- What other drugs (including herbs, vitamins and minerals) might interact with this medication?
- What effect will this drug have on my other medical conditions?
- Are there any reactions that should be reported immediately?
- How often do I need to go back to the doctor for review?
- Is the drug available at a subsidized rate?

Herbal Medicine and Alternative Therapies

Herbs contain powerful, biologically active substances,

and the earliest medical texts make references to herbal substances to treat disorders of the mind. In recognition of this, much research is being conducted to discover just what the role herbs, vitamins and minerals play in the prevention and treatment of Alzheimer's disease.

Low levels of folic acid and vitamin B12 are now recognized as risk factors in the development of Alzheimer's disease. Antioxidants such as vitamins E, A and C, and the herb Ginkgo biloba, destroy oxygen radicals (by-products of metabolism) that are known to damage brain proteins, fats and DNA. In Germany, Ginkgo biloba is routinely used within treatment regimes for Alzheimer's disease.

Some herbs are known to act as anticholinesterases. That is, these herbs have similar actions to Aricept, Exelon and Reminyl, but are not as potent.

That herbs, vitamins and minerals play an important role in the maintenance of health is not disputed. But their exact benefit in the treatment of Alzheimer's disease or other forms of dementia has yet to be determined, and they are not a cure for these diseases.

Herbs, vitamins and minerals will interact with medications. So if you decide to use herb and vitamin supplements as well as conventional medications, *please check with your doctor first.*

Other alternative therapies that have been trialed as possible preventions or treatments for Alzheimer's disease include oestrogen therapy and non-steroidal anti-inflammatory drugs (*NSAID's*).

To date, oestrogen therapy trials have yielded inconclusive and often contradictory results as to their benefits in the prevention and treatment of Alzheimer's disease. Non-steroidal anti-inflammatory drugs have a wide range of potentially serious side effects, so their use for the prevention and treatment of Alzheimer's disease is not recommended.

Drugs and Behaviour

Agitation, anxiety and paranoia are just some of the behaviours that may occur in people with dementia, and frequently drugs are administered in an effort to control them. Many of the drugs used for behaviour control work by blocking acetylcholine, the chemical already in short supply in people who have Alzheimer's disease, and as a result worsen memory, thought processing and cause further behavioural disturbances. Common medications that can cause problems for people with dementia include:

- Anti-psychotic drugs and some anti-depressant drugs. Side effects include drowsiness, sleep

