

# Memantine (Ebixa) Drug treatment for Alzheimer's disease

# Introduction

Memantine (marketed as Ebixa) is the newest drug treatment currently available in the UK for the treatment of Alzheimer's disease. The others are called donepezil hydrochloride (common brand name Aricept), rivastigmine (common brand name Exelon) and galantamine hydrobromide (common brand name Reminyl) – see information sheets 11, 14 and 17.

For the purposes of this information sheet, memantine will be referred to as Ebixa, since it is the brand most people will be familiar with, although other brands may become available.

Ebixa is the name given to the particular brand of memantine marketed by a company called Lundbeck Ltd. It is licensed for the treatment of moderate to severe Alzheimer's disease.

The severity of an individual's Alzheimer's disease is often defined by their score out of 30 on a test called the Mini Mental State Examination (MMSE):

mild:	MMSE 21-26
moderate:	MMSE 10-20
severe:	MMSE less than 10.

The MMSE is a very basic screening test and most people will undergo a series of tests, scans and assessments leading up to their dementia diagnosis. The MMSE may also be used as one method of determining the progress of a person's illness, but should be combined with other assessments and observations, including those of spouses, partners, family members and other carers. The MMSE scale may be of limited use with people with learning difficulties or those whose preferred language is not English.

Ebixa is not claimed to be a cure for Alzheimer's disease. It treats only the symptoms and there is no evidence to show that it could halt or reverse the process of cell damage that causes Alzheimer's disease.

# How does Ebixa work?

Ebixa works differently to the other drugs designed to treat Alzheimer's disease.

Alzheimer's disease and some other types of dementia damage brain cells. This damage

causes brain cells to release too much glutamate, a chemical which carries messages between cells in lots of different parts of the brain.

At the brain cell level, Ebixa specifically works between neighbouring cells to better control for the effects of elevated levels of glutamate (in the absence of Ebixa, abnormally high levels of glutamate causes irritation and contributes to continued cell damage).

The action of Ebixa helps to maintain normal signalling between cells for longer and provides symptomatic improvements that slow the progression of the disease.

Ebixa can help to improve memory and functioning and may control behavioural symptoms for a period of time, though these symptomatic improvements are time limited.

# Who might benefit?

It is important to realise that Ebixa will not help everyone who tries it. Even in those who do benefit, there can be a lot of variation.

Ebixa is licensed only for people with Alzheimer's disease who are in the moderate to severe stages of the illness. It is not licensed for people with other kinds of dementia.

Recent (2011) guidance from NICE (the National Institute for Health and Clinical Excellence) says that Ebixa is recommended as a treatment option for people with moderate Alzheimer's disease who are unable to tolerate or take any of the cholinesterase inhibitors drugs licensed for mild to moderate Alzheimer's disease (Aricept, Exelon and Reminyl) and for people with severe Alzheimer's disease.

# What effect might Ebixa have?

The effect of the drug will vary for different people. Some will not notice an effect at all. Others may find that their condition improves, or that they stay the same when they would have been expected to get gradually less able because of the progression of Alzheimer's disease.

Ebixa can temporarily slow down the progress of symptoms affecting everyday functions and activities. There is also some evidence suggesting that Ebixa may also help with behavioural symptoms like aggression and agitation.

Some of the benefits may be quite subtle and not easily measured on clinical assessment scales; nevertheless they can improve quality of life of not only the person with dementia, but also the person's main carer.

#### Combining dementia drugs

Since the other dementia drugs are designed for people in the mild to moderate stages of Alzheimer's disease, these would normally be stopped before someone starts taking Ebixa.

However, some research has suggested that combining Ebixa and Aricept may be more effective than using Aricept on its own and some doctors in Scotland have prescribed both at the same time where they think someone would benefit. In some cases, doctors may decide to keep prescribing Aricept at the same time, until the person gets used to taking Ebixa, so there is an overlap in the treatment rather than suddenly stopping one drug and starting another.

#### How is Ebixa taken?

Ebixa comes in two forms: as tablets and as an oral solution.

You should read the patient information leaflet that comes with each form of the drug and take it as directed by the doctor who prescribed it.

#### Tablets

Ebixa tablets should be taken once a day and at the same time every day. The tablets should be swallowed with some water. They can be taken with or without food. The recommended daily dose of Ebixa tablets is 20mg but, to reduce the risk of side effects, treatment is started at 5mg once a day for the first week, 10mg for the second week, 15 mg for the third week, then 20mg for the fourth week and beyond.

Lundbeck now supply a treatment initiation pack which contains 5, 10, 15 and 20mg tablets. Once the maximum dose is reached, you will receive 20mg tablets only.

#### **Oral solution**

Ebixa oral solution should be taken once a day, and at the same time every day. It should be taken with a little water and can be taken with or without food. The solution must not be pumped directly into the mouth but measured onto a spoon or into a glass of water.

The drug is supplied in a pump dispenser which delivers a 5mg dose with each downward pump of the dispenser.

The recommended daily dose of the oral solution is 20mg. As with the tablet form, the dose is started at 5mg (one pump of the dispenser) once a day for the first week, 10mg (two pumps) for the second week, 15 mg (three pumps) for the third week, then 20mg (four pumps) for the fourth week and beyond.

#### **Missed doses**

If you forget to take a dose, don't worry, just take your dose the next day at the usual time. Do not take more than one dose a day to make up for a missed dose.

If you have missed several doses, tell the doctor. It may be necessary to start again with a lower dose to build up tolerance.

#### Are there any side effects?

Like all medicines, there may be side effects from taking Ebixa. Side effects are more common when someone begins to take Ebixa or when the dose is increased, but usually settle down with time.

It is not possible to tell in advance who will have side effects and who will not.

With Ebixa, common side effects include headache, sleepiness, constipation, dizziness, and hypertension (high blood pressure).

If you experience any side effects at all (including any not mentioned above) you should report this to your doctor at once. In many cases, the side effects will fade but you may need to try a different drug instead.

# Coping with side effects

Although you should report any side effects to your doctor, there are some things you can do yourself to help you cope with some of the more common ones:

- If you develop headaches, ask your pharmacist to recommend a suitable painkiller. If headache persists though, report it to your doctor
- If you become constipated, try to eat a well balanced diet containing plenty of fibre and drink 6-8 glasses of water each day. If constipation continues to be a problem speak to your pharmacist or doctor
- If you feel drowsy or dizzy, you should not do anything that would normally require you to be fully alert, like driving or operating machinery. Avoid alcohol as it will increase any feelings of drowsiness.

# Interactions with other drugs

It is important to tell the doctor about all the drugs that you are taking because Ebixa may interact with them. This includes prescription and non-prescription drugs, vitamins, herbal remedies or dietary supplements.

Examples of drugs Ebixa can interact with include anticonvulsants (taken by people who have seizures) and anticholinergics (taken by people with movement disorders or intestinal cramps). Check with your doctor if anything you are taking could interact badly with Ebixa or cause it to not work properly.

#### Interactions with other conditions

You should also tell the doctor about any medical conditions or allergies you have.

If you have a history of epilepsy, suffer from kidney problems, have recently had a heart attack, suffer from congestive heart failure or uncontrolled high blood pressure, you may still be able to take Ebixa but you should be closely monitored by your doctor.

Ebixa oral solution contains sorbitol. People who have rare hereditary fructose intolerance should not take Ebixa oral solution. The tablets do not contain sorbitol and may be a suitable alternative.

Ebixa tablets and oral solution are lactose free.

# Overdose

If you have taken too much Ebixa, contact a doctor or hospital straight away for advice. Take any remaining tablets and the packaging with you. NHS 24 (telephone 08454 24 24 24) may be able to give you advice over the phone when your GP practice or health centre is closed.

# How to get Ebixa

NHS prescriptions are now free in Scotland.

Ebixa will normally be prescribed by a specialist doctor (for example, a psychiatrist) but sometimes local arrangements may allow a GP with a special interest in dementia to prescribe. If you need to see a specialist, your GP will arrange this. The doctor prescribing Ebixa should also talk to your main carer (partner, spouse or family member) about your condition and how you are both coping.

The doctor will use his or her clinical judgement to determine whether or not to

prescribe Ebixa for you. Some people may be unable to take Ebixa because of other conditions or medication they are taking and the risk of harmful side effects.

Remember that Ebixa is licensed for people with moderate to severe Alzheimer's disease so people in the early stages of the illness are highly unlikely to be given it. It may be given to people with moderate Alzheimer's disease who are unable to tolerate or take any of the cholinesterase inhibitors drugs (Aricept, Exelon and Reminyl) and to people with severe Alzheimer's disease.

#### Reviews

You should have regular check-ups while taking any of these drugs, particularly in the early stages when the dosage is being determined. If you have a carer, they should be asked about their observations on how you are doing and any changes or side effects they have noticed.

The arrangements for reviews will vary from place to place. People receiving Ebixa are likely to be reviewed at a specialist outpatient clinic (sometimes called a memory clinic); or reviews might take place in your own home, perhaps involving a community psychiatric nurse (CPN); in some cases reviews will be carried out by your GP who will liaise with the hospital specialist.

In Scotland, anyone with a diagnosis of dementia should be placed on their GP dementia register and receive a review at least annually, regardless of whether they are receiving a drug treatment or not.

# Stopping the drug

Anyone who wants to stop taking the drug should ideally speak to their doctor first or as soon as possible after stopping the treatment.

If you have been on Ebixa for some time but have started to deteriorate or you and/or your carer feel there is no noticeable benefit for you, the doctor may decide to withdraw the drug.

Guidance from NICE (the National Institute for Health and Clinical Excellence) says that treatment should be continued "only when it is considered to be having a worthwhile effect on cognitive, global, functional or behavioural symptoms".

The decision to stop drug treatment should not be taken simply on the basis of your score on the commonly used Mini Mental State Examination (MMSE). The doctor should discuss it with you and any carer or family member involved - their knowledge of your abilities and condition are important.

It is likely that your condition will deteriorate after stopping the drug. Some people report an almost immediate effect while others say it takes several days or weeks for a difference to show.

# Availability

Ebixa is now recommended as a treatment option for people with severe Alzheimer's disease. It is also an option for people with moderate Alzheimer's disease who are unable to take any of the cholinesterase inhibitors (Aricept, Exelon or Reminyl). Because of this, where doctors believe patients may benefit, there should be no difficulty in obtaining Ebixa.

If you or the person you care for are told they cannot have Ebixa, there are likely to be good medical reasons which the doctor should explain to you.

# Warning

No-one should attempt to obtain supplies of Ebixa (or any generic equivalent) by ordering it over the Internet. There are many overseas online pharmacies or websites offering drugs without prescription.

Overseas suppliers are not subject to the same controls as UK companies and many

have websites which advertise the supply of drugs which are only available on prescription in Britain.

Avoid buying prescription drugs from unregulated suppliers. Not only are you potentially putting your health at risk by taking drugs without a medically supervised prescription, there is also no guarantee that the "drug" is what it claims to be. It could also be contaminated by other substances.

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