

Dementia: drugs used to relieve behavioural symptoms

This factsheet should be read in conjunction with factsheet CSMinfo2 Risperidone and olanzapine: restrictions on use

People with dementia may at some point in their illness develop symptoms such as depression, restlessness, aggressive behaviour and psychosis (delusions and hallucinations). While it is important to try to understand and address the underlying reasons for these problems, it may be necessary at times to prescribe medication if the symptoms are distressing, persistent and have not responded to psychological treatments. This information sheet describes the different types of drugs that may be prescribed.

Avoid drugs unless they are really necessary

Before any of the drugs mentioned in this information sheet are prescribed it is essential to ensure that the person with dementia is physically healthy, comfortable and well cared for.

Whenever possible, the person should be helped to lead an active life, with interesting and stimulating daily activities. By minimising distress and agitation it is usually possible to avoid the use of sedative drugs altogether.

If, after trying non-drug treatments, drugs are considered to be necessary remember:

- All drugs have side-effects that may worsen symptoms.
- Always ask the prescribing doctor (usually the GP) why the drug is being prescribed, what the side-effects may be and what you should do if they occur.
- Don't assume that a drug that has proved to be useful at one time will continue to be effective. Dementia is a degenerative condition. The chemistry and structure of the brain will change during the course of the illness.
- Bear in mind that certain combinations of drugs may counteract each other. Remind your doctor if other medications are being taken.
- If a drug is prescribed, check with your doctor that there is a clear plan to review the medication and to stop it as soon as possible. Usually a trial of stopping drugs is recommended after three months.

Taking drugs

Drugs will be more effective if they are taken exactly as prescribed by the doctor, in the correct dose and monitored regularly for side-effects.

If symptoms are difficult to control, the GP may refer to a specialist for further advice.

 Some drugs need to be taken regularly to have an effect - for example, antidepressants and major tranquillisers (often called antipsychotics or neuroleptics). These drugs are not helpful when given on an 'as needed basis'. Other drugs, such as hypnotics or anxiety-relieving drugs, may be more effective when taken on an as needed basis. This should only be done after discussion with the doctor.



- Do not expect immediate results. Benefits may take several weeks to appear, particularly with antidepressants and major tranquillisers.
- Side-effects may occur early or late in the course of treatment it is important that you ask the doctor what to expect.
- Side-effects are usually related to the dose. The doctor will usually 'start low and go slow', gradually increasing the dose until the desired effects are achieved.
- Once treatment has been established it is important that it is reviewed regularly. Take all medications to clinic and hospital appointments.
- Remember that some of the drugs taken to control behavioural symptoms can be dangerous if accidentally taken in large quantities. Make sure medicines are kept safe and secure.

Names of drugs

All drugs have at least two names - a generic name, which identifies the substance, and a proprietary (trade) name, which may vary depending upon the company that manufactured it. Generic names are used in this information sheet - at the end you will find a list of drugs in common use, giving both the generic and proprietary names.

Drugs for treating agitation, aggression and psychotic symptoms

Major tranquillisers (also known as neuroleptics or antipsychotics) are drugs that were originally developed to treat people with schizophrenia.

The use of major tranquillisers in people with dementia remains controversial and clinical trials are in progress to better determine their effectiveness. At the moment, none of these treatments are specifically licensed to treat people with dementia, although they are frequently prescribed to treat symptoms including agitation, delusions (disturbed thoughts and false beliefs), hallucinations (seeing and hearing things that are not there), sleep disturbance and aggression.

Side-effects

- Side-effects include excessive sedation, dizziness, unsteadiness and symptoms that resemble those of Parkinson's disease (shakiness, slowness and stiffness of the limbs).
- Major tranquillisers may be particularly dangerous for people with dementia with Lewy bodies, possibly causing sudden death. If a person with dementia with Lewy bodies must be prescribed a major tranquilliser, it should be done with the utmost care, under constant supervision, and should be monitored regularly.
- A new generation of major tranquillisers may be less prone to produce troublesome side-effects, although some of these drugs (risperidone and olanzapine) have been determined to be unsuitable for use in people with dementia because of the high risk of stroke. So far, there is very little information about the possible risk of stroke with other drugs in this class, such as quetiapine; therefore, their use is not recommended at the moment.



- Whichever drug is used, treatment with major tranquillisers should be regularly reviewed and the dose reduced or the drug withdrawn if side-effects become unacceptable.
- Excessive sedation with major tranquillisers may reduce symptoms such as restlessness and aggression at the expense of reducing mobility and worsening confusion.
- Evidence is also beginning to accumulate to suggest that major tranquillisers may accelerate the rate of decline and disease progression in people with dementia, so there are particular concerns about the long term use of these drugs.

Anticonvulsant drugs, such as sodium valproate and carbamazepine, are sometimes also used to reduce aggression and agitation, as is the antidepressant drug trazodone.

Drugs for treating depression

Symptoms of depression are extremely common in dementia. In the early stages they are usually a reaction to the person's awareness of their diagnosis. In the later stages of the illness, depression may also be the result of reduced chemical transmitter function in the brain. Simple non-drug interventions, such as an activity or exercise programme, can be very helpful. In addition, both types of depression can be effectively treated with antidepressants, but care must be taken to ensure that this is done with the minimum of side-effects.

Antidepressants may be helpful not only in improving persistently low mood but also in controlling the irritability and rapid mood swings that often occur in dementia and following a stroke.

Once started, the doctor will usually recommend prescribing antidepressant drugs for a period of at least six months. In order for them to be effective, it is important that they are taken regularly without missing any doses.

Improvement in mood typically takes two to three weeks or more to occur, whereas side-effects may appear within a few days of starting treatment.

Side-effects

- Tricyclic antidepressants, such as amitriptyline, imipramine or dothiepin, which are commonly used to treat depression in younger people, are likely to increase confusion in someone with dementia. They might also cause a dry mouth, blurred vision, constipation, difficulty in urination (especially in men) and dizziness on standing, which may lead to falls and injuries.
- Newer antidepressants are preferable as first line treatments for depression in dementia.
- Drugs such as fluoxetine, paroxetine, fluvoxamine, sertraline and citalopram (known as the selective serotonin re-uptake inhibitors) do not have the side-effects of tricyclics and are well-tolerated by older people. They can produce headaches and nausea, especially in the first week or two of treatment. There is very limited information about the use of other newer antidepressants in people with dementia, although one large treatment study (M Roth, CQ Mountjoy and R Amrein, 1996) suggests that moclobemide is an effective treatment. Venlafaxine has many of the side-effects of tricyclic antidepressants, but can be very helpful in people who have not responded to other treatments.



Drugs for treating anxiety

Anxiety states, accompanied by panic attacks and fearfulness, may lead to demands for constant company and reassurance.

Short-lived periods of anxiety, for example in response to a stressful event, may be helped by a group of drugs known as benzodiazepines. Continuous treatment in excess of two to four weeks is not advisable because dependency can occur, making it difficult to stop the medication without withdrawal symptoms.

Side-effects

- There are many different benzodiazepines, some with a short duration of action, such as lorazepam and oxazepam, and some with longer action, such as chlordiazepoxide and diazepam. All of these drugs may cause excessive sedation, unsteadiness and a tendency to fall, and they may accentuate any confusion and memory deficits that are already present.
- Major tranquillisers (see above) are often used for severe or persistent anxiety. If taken for long periods these drugs can produce a side-effect called tardive dyskinesia, which is recognised by persistent involuntary chewing movements and facial grimacing. This may be irreversible, but is more likely to disappear if it is recognised early and the medication causing the problem stopped.

Drugs for treating sleep disturbance

Sleep disturbance, and in particular persistent wakefulness and night-time restlessness, can be distressing for the person with dementia and disturbing for carers. Many of the drugs commonly prescribed for people with dementia can cause excessive sedation during the day, leading to an inability to sleep at night.

Increased stimulation during the day can reduce the need for sleep-inducing medications (hypnotics) at night.

Hypnotics are generally more helpful in getting people off to sleep at bedtime than they are at keeping people asleep throughout the whole of the night. They are usually taken 30 minutes to one hour before going to bed.

Chlormethiazole is generally well tolerated by elderly people, although some cannot take it because it produces an unpleasant itching sensation in the nose. Benzodiazepines (see section on drugs for treating anxiety) such as temazepam are frequently prescribed.

Side-effects

• If excessive sedation is given at bedtime, the person may be unable to wake to go to the toilet and incontinence may occur, sometimes for the first time. If the person does wake up during the night despite sedation, increased confusion and unsteadiness may occur.



• Hypnotics are often best used intermittently, rather than regularly, when the carer and person with dementia feel that a good night's sleep is necessary for either or both of them. The use of such drugs should be regularly reviewed by the doctor.

Anti-dementia drugs

The new generation of anticholinesterase drugs was originally developed to improve memory and the ability to carry out day-to-day living activities in people with Alzheimer's disease. Evidence suggests that these drugs also have beneficial effects on behavioural symptoms, particularly apathy (lack of drive), mood and confidence, delusions and hallucinations. Taking anti-dementia drugs may therefore reduce the need for other forms of medication. However, in higher doses these anti-dementia drugs may occasionally increase agitation and produce insomnia with nightmares.

Memantine is the most recent anti-dementia drug to be developed. It works in a different way to the anticholinesterase drugs and is the first drug suitable for those in the middle to later stages of Alzheimer's disease. It is thought to slow the rate of disease progression rather than to have immediate effects on behavioural symptoms.

Commonly prescribed drugs

This list includes the names of many (but not all) of the different medications available. New drugs are appearing all the time and you may need to ask your doctor what type of medication is being prescribed. The generic name is given first, followed by some of the common proprietary (trade) names.

Major Tranquillisers

Amisulpride (Solian) Chlorpromazine (Largactil) Fluphenazine (Modecate) Haloperidol (Haldol, Serenace) Olanzapine (Zyprexa) Promazine (Promazine) Quetiapine (Seroquel) Risperidone (Risperdal) Sulpiride (Dolmatil, Sulparex, Sulpitil) Trifluoperazine (Stelazine) Zotepine (Zoleptil) Zuclopenthixol (Clopixol)

Antidepressants

Amitriptyline (Lentizol) Amoxapine (Asendis) Citalopram (Cipramil) Dothiepin (Prothiaden) Doxepin (Sinequan) Fluoxetine (Prozac) Fluvoxamine (Faverin) Imipramine (Tofranil) Lofepramine (Gamanil) Mirtazipine (Zispin) Nefazodone (Dutonin) Nortriptyline (Allegron) Paroxetine (Seroxat) Reboxetine (Edronax) Sertraline (Lustral) Trazodone (Molipaxin) Venlafaxine (Efexor)

Other mood stabilisers

Lithium carbonate (Camcolit, Priadel, Liskonum)

Anxiety-relieving drugs

Alprazolam (Xanax) Buspirone (Buspar) Chlordiazepoxide (Librium) Diazepam (Valium) Lorazepam (Ativan) Oxazepam (Oxazepam)

Hypnotics

Chloral hydrate (Welldorm) Clomethiazole (Heminevrin) Flurazepam (Dalmane) Nitrazepam (Mogadon) Temazepam (Temazepam) Zopiclone (Zimovane)



Zolpidem (Stilnoct)

Antidementia drugs

Donepezil (Aricept) Rivastigmine (Exelon) Galantamine (Reminyl) Memantine (Ebixa)

Anticonvulsant drugs

Sodium valproate (Epilim) Carbamazepine (Tegretol)

References

Roth, M, Mountjoy, CQ and Amrein, R (1996) 'Moclobemide in elderly patients with cognitive decline and depression'. British journal of psychiatry 168: 149-157.

This information sheet was written by Ian McKeith, professor of old age psychiatry at Newcastle General Hospital.

Carers' advice sheet 408

Last updated: March 2004 Last reviewed: March 2004