# Depression in elderly people

## **DECISION TO PRESCRIBE**

### Have I identified the cause of the depression?

Treat any underlying causes as well as the depression.

## What am I trying to achieve?

- Relieve depression.
- Improve quality of life and functional ability.

## Is this what the patient wants?

 Some elderly people perceive a low mood as normal and will not seek help. Discussion with the patient may help achieve appropriate management.

## Is there evidence that drugs help achieve this?

- Elderly people respond as well to antidepressants as younger people.
- SSRIs are a suitable initial therapy for most depressed elderly people.

 TCAs are suitable in people who are unresponsive or intolerant to SSRIs.

### Are there non-drug therapies?

- Psychological therapy used alone or as an adjunct to pharmacotherapy may improve outcomes.
- Social, environmental and household support is often just as important as pharmacological and psychological therapies in helping elderly people with depression.
- Exercise is beneficial and some people may choose to use alternative therapies.

## Do potential benefits outweigh harms?

 Untreated depression can cause significant disability. Treating depression adequately can help to improve quality of life and relieve suffering. Harms can be minimised with the correct choice of drug and dose and adequate monitoring.

#### Medical conditions associated with depression

- Viral infection
- Certain endocrine disorders (e.g. thyroid disorders, Cushing's syndrome, adrenal insufficiency, hyperparathyroidism)
- Malignancy
- Cerebrovascular disease (e.g. stroke, vascular dementia)
- Parkinson's disease
- Myocardial infarction
- Metabolic disorder (e.g. B12 or folate deficiency, malnutrition)

#### Medicines associated with depressed mood

- Benzodiazepines or other central nervous system depressants
- Beta-blockers (especially lipid soluble e.g. propranolol)
- Steroids
- Anti-parkinsonian drugs
- Dextropropoxyphene

List adapted from Alexopoulos<sup>3</sup> and Prodigy<sup>4</sup>

## Depression is common in elderly people

Depression in older people is common. It often goes unrecognised by both patients and doctors, is frequently under-treated, and can account for greater levels of disability than physical illness.<sup>1</sup>

Other causes of low mood may be even more common, can be more difficult to diagnose, and can still cause significant suffering.<sup>2</sup>

## Depression in elderly people is a significant cause of disability

Depression is a significant cause of disability, causing suffering, family disruption and possibly worsening outcomes of other co-morbidities. The New Zealand Mental Health Survey established that mood related disability is greater than disability related to chronic conditions. The causes of depression in older people may be different from younger people. Age-related disorders increase the vulnerability to depression; cancer, stroke, myocardial infarction and Parkinson's disease are all associated with depression in elderly people. Various medications can cause a depressed mood, including, beta-blockers, corticosteroids and anti-parkinsonian drugs.

Depression in this population can be harder to treat due to increased clinical complexity.<sup>5</sup>

## Depression is under recognised and under treated in elderly people

There are complex reasons for under-recognition of depression in elderly people. Barriers to diagnosis may include time constraints, other co-morbidities which complicate diagnosis and reluctance to discuss emotional problems. The stigma associated with depression may prevent elderly people seeking medical help and older people may also perceive that a low mood is normal.

Some studies report that less than 30% of elderly depressed patients receive adequate antidepressant therapy.<sup>6</sup> Antidepressants prescribed at insufficient doses and for an inadequate length of time contribute to treatment failure. Adherence is a major factor influencing the success of treatment and is often complicated by complex medication regimens, disability and cognitive impairment.<sup>3,4</sup>

## Diagnosis of depression

Symptoms of depression in elderly people can often be mistakenly attributed to "normal" old age. On the other hand some symptoms frequently associated with depression may be caused by other problems. For example, pain may contribute to a decreased interest or pleasure in activities, denture related eating difficulties can contribute to weight loss and many elderly people have disruptions in sleep patterns that may not be related to depression.

Tools such as the Geriatric Depression Scale (page 25) have been specifically developed for older populations to address these issues and give more weight to mood-related symptoms.<sup>7</sup>

## Pharmacological treatments

## Elderly people respond as well to antidepressants as younger people

Once a diagnosis is made it is important to treat depression in elderly people adequately. This includes using the correct antidepressant at adequate doses for a sufficient treatment period. Maximal response may not be reached for up to 8–10 weeks and uptitration can continue for longer periods. Evidence suggests that depressed elderly people respond as well to antidepressants as younger people with depression.<sup>3</sup>

## SSRIs can be used initially for most depressed older people

SSRIs are generally considered first line in depressed older people. SSRIs have a similar efficacy to TCA antidepressants but SSRIs may be better tolerated by elderly people.<sup>8</sup>

Starting with a low dose and increasing gradually reduces the risk of adverse effects. Although initial doses of SSRIs should be lower in older people, maintenance doses may be similar to those used in younger people.<sup>3</sup>

Fluoxetine has a long half life and can take three to four weeks to reach steady state which can complicate dose titration. Paroxetine and citalopram have shorter half lives but withdrawal reactions are a disadvantage which requires tapering on discontinuation. Citalopram would

be a suitable choice because it has less potential for interactions, which may be a particular concern in elderly people already on complex regimens.

It is important to trial any antidepressant for four to six weeks after reaching the recommended dose, before it is determined ineffective and another drug is tried.

#### TCAs used if unresponsive or intolerant to SSRIs

Tricyclic antidepressants may be considered in those who do not respond or who are not tolerant of SSRIs. Again initial doses should be low and increased gradually. TCAs may be more appropriate initially if a concurrent medical condition exists such as urinary incontinence, where a TCA may be substituted for oxybutynin.

Nortriptyline is a suitable choice of TCA because it has less sedative and anticholinergic effects, and may cause less orthostatic hypotension. It is safer to use in elderly people than other TCAs, such as amitriptyline, dothiepin or doxepin.<sup>3</sup>

Table 1 (page 22) compares these two different classes of antidepressant.

## Other pharmacological treatment options

The reversible monoamine oxidase inhibitor (MAOI), moclobemide, can be used but there is limited evidence of its efficacy in elderly people.<sup>6</sup>

Irreversible MAOIs should only be considered in those who have had a previous good response to them or who are intolerant of other agents. They have many interactions, including food interactions, making them difficult to use safely.

Elderly people with treatment resistant depression can use venlafaxine but special consideration should be given to the potential for adverse cardiovascular effects (see BPJ 1 – Venlafaxine ).

Table 1: Comparison of SSRIs and TCAs

	SSRIs	TCAs
Side effects	Common - nausea, vomiting, diarrhoea, dizziness, drowsiness, insomnia, agitation, and anxiety. Often these can be prominent in the initial phase of treatment but may improve with time. Increased risk of falls.  Uncommon – hyponatraemia. Symptoms are usually non-specific and include anorexia, nausea, fatigue, lethargy, and confusion. If patients develop any of these symptoms hyponatraemia should be considered and electrolyte levels should be measured.	Common - Anticholinergic side effects which include dry mouth, blurred vision, urinary retention, constipation, and sedation. Increased risk of falls and associated fractures in elderly people.  Uncommon – cardiotoxicity. This is an important consideration in elderly people with co-morbid cardiac disease.
Interactions	Fluoxetine and paroxetine inhibit the hepatic cytochrome P450 isoenzymes and interact with other drugs metabolised by these enzymes such as TCAs.  Citalopram has a relatively low risk of interactions in comparison.	Increased anticholinergic effects if other anticholinergic drugs are taken in combination. These include other antidepressants, some antiparkinsonian drugs, antihistamines, antipsychotics, and antiemetics.
	SSRIs may increase the risk of bleeding and the risk may be further increased by concurrent use of other medicines that increase bleeding risk such as warfarin, NSAIDs or aspirin.	
Cautions	Withdrawal symptoms may occur if antidepressants are discontinued abruptly. Doses should be tapered over at least four weeks. <sup>6</sup>	Co-morbid cardiac disease  History of epilepsy  TCAs are very toxic in overdose

#### Antidepressants and co-morbidities

Depression with a mental or physical co-morbidity is common in elderly people and is likely to respond to antidepressant treatment. Prescribers may have concerns about interaction of the treatment with the co-morbid condition.

- Cardiac disease TCAs may induce arrhythmia and can cause hypotension. Caution is required with venlafaxine. SSRIs appear to be generally safer but this has not yet been subject to large-scale trials.
- Epilepsy SSRIs and TCAs may lower seizure threshold; use low doses and titrate slowly.
- Glaucoma TCAs can precipitate acute narrow-angle glaucoma, SSRIs are less implicated.
- Prostatism TCAs may lead to urinary obstruction for men with prostatism.
- Parkinson's disease SSRIs and TCAs may be used although caution is required with TCAs because of their side effect profile.
- Dementia Depression can be treated in people with dementia as it can in other older people with depression. Depression responds to antidepressants even in the presence of dementia.<sup>4</sup>

## Falls and depression go hand in hand

Depression is a significant risk factor for falls and falls predispose development of depression. Drug treatment for depression is also an independent risk factor for falls, SSRIs are no safer than TCAs.<sup>9</sup>

The exact reason for this close association between falls and depression is not known. Whether depression

results in decreased activity, deconditioning and physical frailty and subsequent falls, or whether there is a central mechanism associated with depression that causes falls, is not known. Some people with depression have an abnormal gait pattern. 10,11

## Non-pharmacological treatment options

Psychological therapy should be considered in all elderly patients with depression. Psychological and pharmacological therapies initiated together are ideal for moderate depression although either treatment alone may be considered in mild depression. Some suitable psychological therapies for elderly people with depression are; cognitive therapy, supportive psychotherapy, problemsolving therapy and interpersonal therapy.

Electroconvulsive therapy can also be used in severe, unresponsive depression although there are risks associated and antidepressant therapy is usually required to maintain remission.

Exercise benefits people with depression and several trials have had promising results as long as the "dose" and intensity of the activity is adequate. Attention to compliance is important for people with depression and the successful trial interventions were intensive and supervised. 12

A review of complementary therapies for depression shows St Johns Wort, QiGong, and massage have some evidence of benefit.<sup>13</sup> St Johns Wort is the most studied of these; however few trials have included older people. It is important to take into consideration potential adverse effects and interactions with conventional treatments.

## A range of interventions are required to improve the quality of life for elderly people with depression

Elderly people with depression are often struggling to cope with the activities of daily living and co-morbidities or major life events may add to the problem. Social, environmental and household support is often just as important as pharmacological and psychological therapies in helping elderly people with depression.

#### References

- Oakley Browne MA, Wells JE, Scott KM (eds). 2006. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health.
- Lyness JM, Kim J, Tang W, et al. The clinical significance of subsyndromal depression in older primary care patients. Am J Geriatr Psychiatry 2007; 15(3): 214-223.
- Alexopoulos GS. Depression in the elderly. Lancet 2005; 365(9475): 1961-1968.
- Prodigy. Depression. Clinical Knowledge Summaries 2005.
   Available from: http://www.cks.library.nhs.uk/depression/view\_whole\_guidance. Accessed November 2007.
- Alexopoulos GS, Katz IR, Bruce ML, et al. Remission in depressed geriatric primary care patients: A report from the PROSPECT study. Am J Psychiatry 2005; 162(4): 718-724.
- Kairuz T, Zolezzi M, Fernando A. Clinical considerations of antidepressant prescribing for older patients. NZ Med J 2005; 118(1222): Available from: http://www.nzma.org.nz/journal/118-1222/1656/
- Yesavage J, Brink T, Rose T, et al. Development and validation of a geriatric depression screening scale: A preliminary report. J Psychiatr Res 1983; 17: 37-49.

- 8. Mottram P, Wilson K, Strobl J. Antidepressants for depressed elderly. Cochrane Database Syst Rev. 2006; 1:CD003491.
- Richards J, Papaioannou A, Adachi J, et al. Effect of selective serotonin reuptake inhibitors on the risk of fracture. Arch Intern Med. 2007;167: 188-194.
- Herman T, Giladi N, Gurevich T, et al. Gait instability and fractal dynamics of older adults with a "cautious" gait: why do certain older adults walk fearfully? Gait Post 2005; 21: 178-185.
- Simonsick EM, Guralnik JM, Fried LP. Who walks? Factors associated with walking behavior in disabled older women with and without self-reported walking difficulty. J Am Geriatr Soc. 1999; 47: 672-680.
- Blumenthal JA, Babyak MA, Moore KA, et al. Effects of exercise training on older patients with major depression. Arch Intern Med 1999; 159(19):2349-2356.
- Meeks TW, Wetherell JL, Irwin MR, et al. Complementary and alternative treatments for late-life depression, anxiety, and sleep disturbance: A review of randomized controlled trials. J Clin Psychiatry 2007; 68(10): 1461-1471.

## **Geriatric Depression Scale**

Instructions: Choose the best answer to describe how you have felt over the past week.

1.	Are you basically satisfied with your life?	YES	NO
2.	Have you dropped many of your activities and interests?	NO	YES
3.	Do you feel that your life is empty?	NO	YES
4.	Do you often get bored?	NO	YES
5.	Are you in good spirits most of the time?	YES	NO
6.	Are you afraid that something bad is going to happen to you?	NO	YES
7.	Do you feel happy most of the time?	YES	NO
8.	Do you often feel helpless?	NO	YES
9.	Do you prefer to stay at home, rather than going out and doing new things?	NO	YES
10.	Do you feel you have more problems with memory than most?	NO	YES
11.	Do you think it is wonderful to be alive now?	YES	NO
12.	Do you feel pretty worthless the way you are now?	NO	YES
13.	Do you feel full of energy?	YES	NO
14.	Do you feel that your situation is hopeless?	NO	YES
15.	Do you think that most people are better off than you are?	NO	YES

To score, count one point for each answer in the right-hand column. A score >10 is almost always depression.