



Dimity Pond

Dementia

An update on management

Background

Dementia is an increasingly common condition in the community. On average, every general practitioner in Australia will see three new cases each year. There are strong reasons for making an early diagnosis of dementia, as this may enable families to plan ahead and to institute management that could reduce cognitive impairment and slow disease progression.

Objective

This article discusses the GP's role in the identification and management of dementia in general practice and provides an update on management of this disease.

Discussion

Several new strategies for the management of dementia have emerged recently and GPs should be aware that optimal management of cardiovascular risk factors will improve cognition and may delay onset. Management of exercise, socialisation and cognitive training may improve cognitive function in early-diagnosed cases. The GP's role in initiating service delivery is an important one, and the practice nurse may play an important role in coordinating services for patients in the early stages of dementia.

Keywords

dementia; Alzheimer disease



Dementia is an increasingly common condition with prevalence expected to rise from just over a quarter of a million currently to just under 1 million in 2050.¹ In Australia, the number of new cases (or the incidence) is expected to rise from around 75 000 in 2010 to 385 000 by 2050.² This means that, on average, every general practitioner in Australia will see three new dementia cases each year. Prevalence may vary, and GPs with a special interest in aged care or those practising in areas with a high percentage of elderly people may see more cases, as will GPs who make visits to residential aged care facilities.

Apart from its high prevalence, there are other reasons why GPs should become proficient in the assessment and management of dementia:

- carers of people with dementia are at risk of depression and carer fatigue and can only be fully supported once a diagnosis is made
- the burden of caring for a person with dementia is identified in funding schemes. For example, the Aged Care Funding Instrument (ACFI) allows for extra funding for those with a diagnosis of dementia living in residential care and some community services depend on the diagnosis in order to provide their services.

Therefore, in order to provide optimal support for their elderly patients, GPs should consider making a diagnosis of dementia explicit.

Update – prevention

We know that older patients should be encouraged to reduce their cardiovascular risk factors, specifically to prevent dementia – both vascular and Alzheimer dementia. Reduction in blood pressure, lipid levels, blood sugar, weight, alcohol intake and smoking may improve cognitive function and prevent or delay the progression of dementia.³ There is growing evidence that regular exercise, social engagement and cognitive training (the 'dose' and complexity are not yet clear, but examples include crosswords and Sudoku) also improve cognitive function,⁴ both in those without dementia and those who already have it.

Update – stage at which a diagnosis should be made

There have been strong calls for a more timely diagnosis of dementia.⁵ How should GPs respond to this call?

The arguments for making an early diagnosis include giving patients and families time to plan ahead and to allow supports to be put in place. Patients and carers can be educated about what lies ahead and make plans to ensure as smooth a pathway into the future as possible.



However, many GPs see patients who do not wish to know the diagnosis, or do not have the opportunity to discuss the possibility of a diagnosis of dementia with carers who are not their patients, and there may be ethical barriers to such discussions if the patient does not agree to it. Some GPs may see the negatives in the slow inevitable decline of dementia and prefer to protect their patients from knowledge of it, especially if they have known the patient for many years. Each case is different, and the GP's role in broaching this issue will vary from patient-to-patient. However, it is evident that more information about the disease, its effects and its progression, is a prerequisite to better planning. A recent study has shown that awareness of the diagnosis was associated with a higher quality of life compared to those who had dementia but were not aware of it.⁶ This is a strong argument for GPs to make the diagnosis early when possible, while keeping in mind patient and carer factors when breaking the news.

The assessment

How should GPs identify dementia? It has been suggested that all patients over a certain age (eg. 75 years) should be screened for dementia using a screening questionnaire such as the Mini-Mental State Examination (MMSE), the General Practitioner assessment of COGNition (GPCOG) or the Rowland Universal Dementia Assessment Scale (RUDAS), which is particularly useful for assessing patients from a non-English speaking background.⁷ However, screening tests will fail to identify dementia in well educated people and will identify as possible dementia many who do not have the disease.⁸ Poorer performance on screening questionnaires may be due to depression, poor education, drug side effects, being unwell or anxious on the day or other factors. For this reason, GPs should use clinical judgement as well as screening tests when assessing patients for dementia.

A reasonable approach is 'case finding', which involves assessing only those with symptoms or signs such as 'lost prescriptions' and missed appointments, or other behaviours mentioned by family members, neighbours, the practice receptionists and others. The patient's own subjective memory complaints should be taken seriously, although not all those with memory complaints will have dementia. In such cases, the assessments listed in *Table 1* should be performed.

Case study – Helen

Helen, aged 79 years, presents complaining that it is taking her a long time to cook her dinner and she has given up some of her usual activities because she 'isn't coping'. On a screening test for cognitive impairment she scores only slightly above the cut-off level. This concerns you because Helen is very well educated and you would have expected a higher score.

Update on assessment

Physical problems that emerge from the physical examination should be addressed, including management of hypoxia secondary to heart failure or chronic lung disease, treatment of infection and management of

constipation. Renal, hepatic, thyroid or other abnormalities revealed on blood testing should also be corrected or treated. Depression should be managed with 'talking treatments' such as cognitive behaviour therapy and counselling and/or antidepressants, and referral to a psychologist if appropriate. Co-existing dementia and depression is a difficult and not uncommon problem, and may require referral to a psychiatrist or psychogeriatrician. Most cases of dementia are sporadic, without a strong genetic basis. However, if there is a strong family history of dementia, especially at early onset, referral for genetic counselling and testing may be considered.

The importance of a medication review has recently come to the fore. Such a review may be done by the GP, or in close collaboration with a pharmacist, and any medications that can be reduced or stopped should be identified. This is known as 'deprescribing' and the optimal approach involves reviewing all current medications,

Table 1. Assessments to be made in dementia^{7,14}

- Clinical history: cognitive, behavioural and psychological symptoms (carer/family input preferable)
- Physical examination: causes of cognitive impairment (eg. urinary tract infection, cardiac failure, visual or hearing impairment)
- Activities of daily living (include safety issues, eg. driving, falls, nutrition)
- Depression (eg. Geriatric Depression Scale)
- Medication review
- Cognitive screening test (eg. MMSE, RUDAS, GPCOG)¹⁵

Routine tests

- Full blood count (FBC)
- Erythrocyte sedimentation rate (ESR)
- Liver function test (LFT)
- Calcium
- Thyroid function
- Vitamin B12, folate
- Computed tomography scan of brain without contrast

If indicated (* recommended)

- Chest X-ray*
- Fasting blood sugar levels (BSL)
- Fasting lipids*
- Fasting homocysteine level
- Electrocardiogram (ECG)*
- Mid stream urine (MSU)*
- Serology for HIV, syphilis

Special investigations

- Electroencephalogram (EEG)
- Magnetic resonance imaging (MRI)
- Positron emission tomography (PET)
- Apolipoprotein E (E4 status confers increased risk)
- Neuropsychological assessment



identifying those to be targeted for cessation and then planning a slow reduction in the offending drugs, in partnership with the patient and their family, and monitoring of adverse effects.⁹ In particular, drugs with anticholinergic or sedative actions may have an additive effect on cognition: with cessation or reduction the patient may ‘wake up’ and engage more effectively. A cognitive function test may be used to track improvement.

Case study continued

You assess Helen for depression, perform a physical examination, order blood tests and a brain CT scan, and ask the pharmacist for a medication review, with a focus on medications that may cause cognitive impairment. You treat any reversible factors and recommend a diet and exercise program, informing Helen that these have been shown to improve cognition. You organise a review in 6 months.

Next steps for Helen

Having treated the reversible causes of cognitive impairment, the GP should review the case and perform another cognitive function test. Ideally, the family or another informant should be consulted for their view on Helen’s progression or decline. The GP should consider which subtype of dementia is present (eg. vascular, Alzheimer or other). If there is some doubt about the diagnosis or the management then Helen should be referred to a specialist service such as a memory clinic. *Table 2* identifies reasons for referral.

If cognitive impairment is definite, the GP may continue to manage Helen. If a trial of anti-dementia drugs is her wish, then the GP must prescribe these in consultation with a specialist. These medications, which include acetylcholinesterase inhibitors for mild to moderate Alzheimer disease (donepezil, rivastigmine and galantamine) and an NMDA glutamate receptor inhibitor (memantine – available on the Pharmaceutical Benefits Scheme for moderately severe Alzheimer disease) may all have a modest effect in some cases.^{10,11} These medications are available on Authority prescription and rules for prescribing are complex and should be checked carefully. There are currently no clear ‘stopping’ rules for ceasing these medications.

The changing role of the GP in ongoing management

With the emergence of evidence in favour of reducing cardiovascular risk factors and encouraging exercise, socialisation and cognitive

training, GPs are in an ideal position to manage dementia. They should also monitor patients for evidence of decreasing functional impairment. An activities of daily living scale,¹² ideally answered by the patient’s carer, may assist with this assessment. The GP may need to consider whether the patient is still fit to drive. Carer support and education should be provided, this may include referral to Alzheimer’s Australia. General practitioners should also recommend that legal issues are addressed while the patient is still competent to do so. This includes a will, power of attorney (for financial matters), guardianship (for health decisions) and advance care planning.¹³

As the patient’s functional impairment increases, support services will need to be mobilised. In the past, GPs often referred patients to the Aged Care Assessment Team (ACAT) for ongoing management. However, workforce shortages and the increasing burden of care of the elderly mean that ACAT (ACAS in Victoria) teams may not be able to manage patients with early dementia who are not yet eligible for packaged care, which includes a case manager. General practitioners may therefore need to refer such patients to other support services (*Table 3*). It is possible that the practice nurse may familiarise herself with local service providers and coordinate care to some extent. As dementia is a chronic disease, a care plan with regular review is an appropriate way to monitor the patient. The practice nurse may be able to assist with reviews of cognitive function, depression and activities of daily living scales.

Conclusion

The number of people with dementia in Australia is growing rapidly. Inevitably this will increase the dementia patient-load for GPs. Additionally, as aged care services are stretched, the management of this group with chronic and complex care needs will fall to GPs and the extended primary care team. General practitioners have a role in promoting reduction of cardiovascular risk factors and encouragement of exercise, socialisation and cognitive training in all older patients, including those with dementia. Clarification of the diagnosis facilitates access to services and may increase the support available to patients and their carers. General practitioners should be aware of the assessment and management of this disease and ways in which they can best enable their patients to access available services.

Table 2. Reasons for referral to specialist services⁷

- Unsure of diagnosis
- Patient is young or atypical
- Symptoms and signs are atypical
- Psychotic or severe behavioural disturbance occur
- Multiple, complex comorbidities exist
- Considering anti-dementia medication

Table 3. Useful contact numbers and websites

- Alzheimer’s Australia National Dementia Helpline: 1800 100 500 (provides carer support, living with memory loss programs and other services)
- Dementia Behaviour Management Advisory Service: 1800 699 799 (provides strategies to help manage behaviour associated with dementia)
- Commonwealth Respite and Carelink Centres: 1800 200 422
- Alzheimer’s Australia: www.fightdementia.org.au (information and support for patients and carers. Tools for dementia assessment, such as RUDAS, in people from a non-English speaking background)
- GPCOG assessment tools: www.gpcog.com.au



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