# MOH CLINICAL PRACTICE GUIDELINES 1/2013 DEMENTIA







Singapore



Association





Clinical Neuroscience Society, Singapore









### **Executive summary of recommendations**

Details of recommendations can be found in the main text at the pages indicated.

## Diagnosis and screening

Individuals who should be evaluated for dementia include those with progressive cognitive or behavioural complaints suggestive of dementia, as well as patients who arouse the physician's or caregiver's suspicion of cognitive impairment despite absence of complaints (pg 17).

Grade C, Level 2<sup>+</sup>

GPP Assessment of dementia should be done via a comprehensive evaluation. This approach will aim to diagnose dementia early, assess for complications of dementia and establish the cause of the dementia (pg 18).

**GPP** 

B In individuals with suspected cognitive impairment, diagnosis should be made using the DSM-IV criteria for dementia with history from a reliable informant. This should be supplemented by an objective approach with bedside cognitive tests and/or neuropsychological assessment (pg 18).

Grade B, Level 2++

D In the evaluation for suspected dementia, the presence of depression should be considered (pg 21).

Grade D, Level 4

B The complications of dementia can be broadly divided into behavioural and psychological symptoms, functional problems and social problems. These should be evaluated in all patients with dementia as these issues are the major causes of stress on the caregiver and assessment would enable the clinician to target subsequent management effectively (pg 22).

Grade B, Level 2++

GPP In the clinic setting, the physician should **routinely ask about depression**, **anxiety**, **agitation**, **paranoia**, **hallucinations and sleep problems**, as these are potentially amenable to treatment, by way of either psychosocial interventions or pharmacologic agents (pg 22).

**GPP** 

The aim of determining dementia aetiology is to rule out potentially reversible causes of dementia and selecting appropriate treatment strategies for the irreversible dementias. This should be done via clinical history and physical examination, followed by laboratory investigations and neuroimaging where appropriate (pg 24).

Grade D. Level 4

GPP Screening for neurosyphilis should be considered for patients with young onset dementia, patients with a history of sexually transmitted diseases and patients presenting with a neuropsychiatric syndrome (pg 25).

**GPP** 

B Clinicians should make a diagnosis of a specific type of dementia based on available criteria. A number of well-validated clinical criteria may be used for the various types of dementia (Alzheimer's disease, vascular dementia, dementia with Lewy bodies, Parkinson's disease dementia and fronto-temporal dementia) (pg 26).

Grade B, Level 2++

Patients' and, where appropriate, their family's preferences for disclosure should be sought with respect to the diagnosis of dementia and acted upon accordingly. The communication of diagnoses should be done in a sensitive and empathic manner, the patient and family should be given time to come to terms with diagnosis (pg 27).

Grade D. Level 4

GPP Genetic testing should not be routinely carried out in the clinical evaluation of dementia (pg 29).

**GPP** 

B Routine testing of APOE (Apolipoprotein E) gene is not recommended in dementia diagnosis and in tailoring dementia risk reduction (pg 30).

Grade B, Level 2++

### Pharmacological management of dementia

GPP Pharmacotherapy should be part of a multi-pronged strategy to dementia management that encompasses a well-established diagnosis and consideration of stage-specific challenges, such as education of patient and caregiver, non-pharmacological measures and comprehensive caregiver psychosocial intervention (pg 31).

**GPP** 

GPP Pharmacotherapy should not be used in isolation in the management of dementia but in conjunction with non-pharmacological management including education and counselling of patient and caregiver (pg 31).

**GPP** 

GPP Patients with dementia should be screened and treated for reversible identifiable causes (such as depression, B12 deficiency and hypothyroidism) and vascular risk factors (pg 32).

**GPP** 

GPP The current evidence for the use of cognitive enhancers is generally based on clinical trials of up to 1 year duration. The use of cognitive enhancers for longer periods will need to include a detailed discussion with the patient and caregivers on the overall benefit of treatment and specific needs of the patient (pg 34).

**GPP** 

A Acetylcholinesterase inhibitors (donepezil, galantamine or rivastigmine) should be considered for the management of patients with mild to moderate Alzheimer's disease (pg 34).

Grade A, Level 1++

A Acetylcholinesterase inhibitors may be considered for the management of moderately severe to severe Alzheimer's disease (pg 35).

Grade A, Level 1<sup>+</sup>

A Where tolerated, acetylcholinesterase inhibitors should be titrated to recommended doses (5-10 mg/day donepezil; 16-24 mg/day galantamine; 6-12 mg/day oral and 4.6-9.5 mg/24 hr transdermal rivastigmine), which have been shown to confer greater benefit compared with lower doses (pg 35).

Grade A, Level 1++

A N-methyl D-aspartate antagonists (memantine) may be considered for the management of moderately severe to severe Alzheimer's disease, either alone or in combination with acetylcholinesterase inhibitors (pg 36).

Grade A. Level 1+

A N-methyl D-aspartate antagonists (memantine) may be considered for treatment of mild to moderate Alzheimer's disease, if acetylcholinesterase inhibitor therapy is contra-indicated, not tolerated or if there is disease progression despite an adequate trial of acetylcholinesterase inhibitor (pg 36).

Grade A, Level 1<sup>+</sup>

A Acetylcholinesterase inhibitors have been shown to be of clinical benefit and may be considered for use in the management of mild to moderate vascular dementia (pg 37).

Grade A. Level 1+

N-methyl D-aspartate antagonists (memantine) have been shown to be of clinical benefit and may be considered for use in the management of mild to moderate vascular dementia (pg 38).

Grade A. Level 1+

GPP Appropriate treatment of vascular risk factors and lifestyle changes including a healthy diet and regular exercise is recommended for all patients with vascular dementia (pg 39).

**GPP** 

B Acetylcholinesterase inhibitors may be considered for the management of cognitive and behavioural symptoms related to Parkinson's disease dementia (pg 39).

Grade B, Level 1+

B Acetylcholinesterase inhibitors or N-methyl D-aspartate antagonists (memantine) may be considered for the management of cognitive and behavioural symptoms related to dementia with Lewy bodies (pg 40).

Grade B, Level 1+

B Selective serotonin reuptake inhibitors (SSRIs) may be considered for the management of behavioural symptoms related to frontotemporal dementia (pg 40).

Grade B, Level 1+

N-methyl D-aspartate antagonists (memantine) and acetylcholinesterase inhibitors may be considered for the management of cognitive and behavioural symptoms related to frontotemporal dementia (pg 40).

Grade C, Level 2+

GPP The choice of acetylcholinesterase inhibitors should be based upon factors such as experience of the clinician, tolerance to side effects, ease of use, and the clinical profile of the individual to be treated (pg 41).

**GPP** 

GPP The decision to initiate cognitive enhancers, such as acetylcholinesterase inhibitors or N-methyl D-aspartate antagonists (memantine), should be made in consultation with the patient and family after careful consideration of the expected magnitude of benefit, side effects, co-morbidities and costs of treatment (pg 42).

**GPP** 

Patients who are started on acetylcholinesterase inhibitors should be monitored for side effects such as nausea, vomiting, diarrhoea and anorexia, and bradycardia (pg 43).

Grade B, Level 1+

GPP Patients who are started on cognitive enhancers should be assessed for cognition, mood and behaviour, and function within 3-6 months of starting therapy and thereafter, at least once yearly or as clinically indicated (pg 43).

**GPP** 

Anti-inflammatory agents (such as non-steroidal anti-inflammatory agents and cyclo-oxygenase 2 inhibitors) are not recommended for the prevention of cognitive decline in Alzheimer's disease (pg 44).

Grade A, Level 1++

B Prednisolone is not recommended for the prevention of cognitive decline in Alzheimer's disease (pg 44).

Grade B, Level 1+

A Oestrogen is not recommended for the prevention of cognitive decline in women with Alzheimer's disease (pg 44).

Grade A. Level 1<sup>++</sup>

A Selegiline is not recommended for the treatment of core or associated symptoms in Alzheimer's disease (pg 44).

Grade A. Level 1+

B High dose vitamin E (in excess of 400 IU per day) is not recommended for the prevention or treatment of Alzheimer's disease (pg 45).

Grade B, Level 1+

B Ginkgo is not recommended for the routine treatment of dementia (pg 45).

Grade B, Level 1+

A Omega 3 fatty acid is not recommended for the prevention or routine treatment of dementia (pg 45).

Grade A. Level 1+

A Statin therapy is not recommended for the prevention or routine treatment of Alzheimer's disease (pg 46).

Grade A. Level 1<sup>++</sup>

A Folic acid and vitamin B supplementation are not recommended for the prevention and treatment of dementia in the absence of B vitamin deficiency (pg 46).

Grade A, Level 1<sup>++</sup>

A Rosiglitazone is not recommended as monotherapy or as adjunctive therapy to cholinesterase inhibitors in mild to moderate Alzheimer's disease (pg 46).

Grade A, Level 1+

A Multi-component and individualised caregiver interventions should be considered for holistic dementia care (pg 49).

Grade A, Level 1+

GPP Where appropriate, respite care may be offered to relieve the burden of caregiving on caregivers of persons with dementia (pg 50).

**GPP** 

B Therapy incorporating cognitive and behavioural strategies may be considered for persons with dementia (pg 51).

Grade B, Level 1+

# Management of behavioural and psychological symptoms of dementia (BPSD)

Environmental design features may be incorporated in care facilities to reduce behavioural and psychological symptoms of dementia (BPSD) in people with dementia (pg 52).

Grade C, Level 2+

Art therapy may be considered for persons with behavioural and psychological symptoms of dementia (BPSD) (pg 52).

Grade D, Level 3

B Reminiscence therapy (RT) may be considered for persons with behavioural and psychological symptoms of dementia (BPSD) (pg 52).

Grade B, Level 1+

Persons with dementia may be encouraged to participate in structured exercise programmes to improve physical function (pg 53).

Grade C, Level 2+

B Music therapy, wherever feasible, is encouraged in the care of persons with dementia and helps in ameliorating the behavioural and neuropsychiatric symptoms of dementia (pg 53).

Grade B, Level 1+

B Aromatherapy is not recommended for reducing agitation in persons with Alzheimer's disease (pg 55).

Grade B, Level 1<sup>+</sup>

B Massage therapy could be considered in reducing agitation in persons with Alzheimer's diseas (pg 56).

Grade B, Level 1+

A Multisensory stimulation is not recommended in the care of elderly patients with dementia (pg 56).

Grade A, Level 1+

GPP Antidepressants may be used for the treatment of comorbid depression in dementia provided their use has been evaluated carefully for each patient (pg 57).

**GPP** 

Antipsychotic medications may be considered in the treatment of behavioural and psychological symptoms of dementia when clinically appropriate and non-pharmacological management has not been useful (pg 57).

Grade A. Level 1\*\*

Potential side-effects and risk/benefit ratio of antipsychotic medication should be discussed with patients and/or caregivers (pg 58).

Grade B, Level 2+

A Routine use of mood stabilizers, such as carbamazepine and sodium valproate, is not recommended for treatment of behavioural symptoms associated with dementia (pg 59).

Grade A. Level 1+

GPP An individualized approach to managing behavioural problems in dementia patients is required (pg 59).

**GPP** 

GPP Acetylcholinesterase inhibitor therapy may be considered in treatment of patients with behavioural problems if antipsychotics are inappropriate (pg 59).

**GPP** 

GPP The decision to start antipsychotic therapy to control behavioural problems in dementia patients should be made in consultation with the patient and family, after careful consideration of the benefit, adverse-effects and co-mordidities (pg 59).

**GPP** 

B For patients with dementia with Lewy bodies and behavioural problems, acetylcholinesterase inhibitors should be considered first for management of the behavioural problems (pg 60).

Grade B, Level 1+

GPP In all patients started on antipsychotic medication, they should be monitored carefully for side effects and response to treatment. In patients who are stable, antipsychotic withdrawal should be considered (pg 60).

**GPP** 

#### Ethical and legal issues

GPP Persons with dementia deemed to have decision making capacity (after clinical evaluation) are encouraged to make a Lasting Power of Attorney (LPA) (pg 62).

**GPP** 

B Routine testing of APOE (Apolipoprotein E) gene is not recommended in dementia diagnosis and in tailoring dementia risk reduction (pg 66).

Grade B, Level 2<sup>++</sup>

The judgement with respect to the ability to drive safely of a person with dementia should only be made after a systematic and comprehensive assessment (pg 68).

Grade D, Level 4

In general, persons whom the physician is unsure if the diagnosis of cognitive impairment might affect driving safety should be referred for further clinical and driving assessment (pg 69).

Grade D, Level 4

GPP In general, the diagnosis of dementia should be disclosed to the patient, unless explicitly stated otherwise (pg 71).

GPP

GPP In disclosure, the doctor should also be mindful of the impact the diagnosis can have on the patient's life and family relationships (pg 71).

**GPP** 

#### Palliative care

B Patients with advanced dementia should be assessed for pain and treated accordingly (pg 75).

Grade B, Level 1<sup>+</sup>

D A stepped protocol is recommended for pharmacological management of pain in dementia, and the WHO analgesic ladder or the American Geriatric Society's pain guidelines may be used (pg 75).

Grade D, Level 4

Decisions on the use of antibiotics in advanced dementia should be individualized to the patient by weighing the risk and benefits of antibiotic treatment (pg 76).

Grade C, Level 2<sup>+</sup>

GPP Decisions on tube feeding should be individualised given the lack of evidence for its efficacy in advanced dementia (pg 77).

**GPP** 

D Advance care planning with regard to cardiopulmonary resuscitation (CPR) should be encouraged given the poor outcomes of CPR in advanced dementia (pg 78).

Grade D, Level 2+

### Young onset dementia

GPP Patients with young onset dementia should receive specialist multidisciplinary care for the diagnosis and management of their condition (pg 79).

**GPP** 

GPP In the diagnostic work up of patients with young onset dementia, neuroimaging and cerebrospinal fluid examination should be considered (pg 79).

**GPP** 

GPP Caregivers of patients with young onset dementia should receive adequate counselling on the disease process, community resources and financial assistance (pg 79).

GPP

### **Community resources**

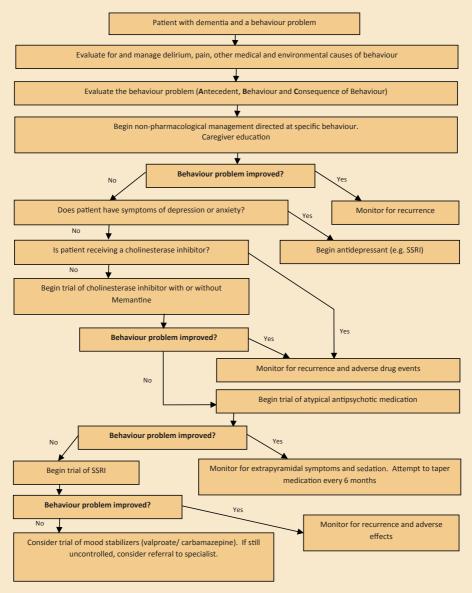
B Caregivers of persons with advanced dementia should be provided with adequate information on available community and medical resources (pg 80).

Grade B, Level 2

B Referral to day care services and respite services should be considered as part of a comprehensive management plan (pg 81).

Grade B, Level 2

#### Algorithm for management of neuropsychiatric symptoms of dementia



SSRI = selective serotonin reuptake inhibitor

Adapted with permission from Sink KM et al. JAMA 2005;293; 596-608. Recommended algorithm for management of neuropsychiatric symptoms of dementia.