Management of DEMENTIA
(2nd Edition)

Forget-me-not

QUICK REFERENCE FOR HEALTHCARE PROVIDERS
**KEY MESSAGES**

- Alzheimers disease (AD) is the most common type of the primary degenerative dementia.

- Routine screening of elder population for dementia at the primary care level is not recommended except in patients with subjective memory complaints or if requested by an informant.

- All patients with suspected dementia at primary care should be referred to a secondary specialist service, and where available a memory clinic.

- History, physical neurological and mental state examination remains an important component of assessment for dementia. Brief cognitive tests can be used to assist diagnosis.

- Behavioural problem and depression should be enquired on a routine basis. All patients with dementia will need to be assessed mainly on basic activities of daily living and instrumental activities.

- Acetylcholinesterase inhibitors and/or memantine may be beneficial in improving cognitive function and behavioural problem.

- Depression in dementia should be treated with antidepressants.

- Antipsychotic should not be used routinely to treat aggression and psychosis. Antipsychotic if prescribed should be specifically targeted, slowly titrated and time limited.

- An evaluation of the caregiver needs should be carried out on a routine basis. A multi-component caregiver intervention (e.g. psychoeducation, problem solving abilities, etc) should be offered.

This Quick Reference provides key messages and a summary of the main recommendations in the Clinical Practice Guidelines (CPG) Management of Dementia (2nd Edition).

Details of the evidence supporting these recommendations can be found in the above CPG, available on the following websites:

Ministry of Health Malaysia : http://www.moh.gov.my
Academy of Medicine Malaysia : http://www.acadmed.org.my
## Risk Factors and Prevention of Dementia

### Non-Modifiable Risk Factors
- Age
- Sex
- Genetic
- Down syndrome
- Intellectual disability

### Potentially Modifiable Risk Factors

#### Cardiovascular
- Good evidence:
  - Hypertension
  - Diabetes
- Insufficient evidence:
  - High cholesterol
  - Folic acid, Vitamin B6 & B12

#### Lifestyle
- Good evidence:
  - Smoking
  - Alcohol consumption
  - Head injury
  - Mental stimulation and education
  - Obesity
- Good practice but insufficient evidence:
  - Exercise
  - Social network

#### Medication
- Insufficient evidence:
  - Antioxidants
  - NSAIDs
  - Statins

## Screening for Dementia

### Questions to be asked on patients with Subjective Memory Complaint

1. **Do you feel like your memory is becoming worse?**
   
   Possible answers are: ‘NO’ or ‘YES’

2. **Proceed to ask questions on the Subjective Memory Decline Scale:**
   
   *(a) Do you have trouble remembering things that have happened to you recently?*
   *(b) Are you worse at remembering where belongings are kept?*
   *(c) Do you have trouble recalling conversations a few days later?*
   *(d) Do you have more trouble remembering appointments and social gatherings?*

   The choices of answers are the following: (1) **NO** (2) **YES**

   Any ‘YES’ answer will require further assessment.
### DSM-IV-TR Diagnostic Criteria for Dementia

<table>
<thead>
<tr>
<th>Cognitive Domain</th>
<th>Questions</th>
</tr>
</thead>
</table>
| **Amnesia**      | Any forgetfulness?  
|                  | Did it start gradually or suddenly?  
|                  | Is it progressively worse?  
|                  | And if so, is it smoothly declining or showing a step-wise/  
|                  | fluctuating decline?  
|                  | Is it over short-term or long-term matters?  |

And declines in one of the following domains:

<table>
<thead>
<tr>
<th>Cognitive Domain</th>
<th>Questions</th>
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</table>
| **Aphasia**      | Any word-finding difficulty or other difficulties with  
|                  | communication?  |
| **Apraxia**      | Any problems with buttoning or dressing?  
|                  | Any difficulties with using utensils during meal times?  |
| **Agnosia**      | Any problems recognising familiar faces or familiar items?  |
| **Executive dysfunctioning** | Any problems handling money (loose change)?  
|                  | Any change in general problem solving abilities?  
|                  | Is one’s work becoming more disorganised?  |

The above domains must be of sufficient severity to cause significant impairment in social or occupational functioning.

|                 | As a result of the above, is the patient becoming less  
|                 | independent in the  
|                 | - community?  
|                 | - home-care?  
|                 | - self-care level?  |

### When and Who to Refer

<table>
<thead>
<tr>
<th>WHEN</th>
<th>WHO</th>
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</table>
| All patients with suspected dementia following assessment | Psychiatrist/Geriatric Psychiatrist  
|                  | Geriatrician  
|                  | Memory clinics where available  |
Presence of symptoms suggestive of dementia (including subjective memory complaint, changes in ADL and/or caregivers concerns)

Perform Clinical Assessment:
- history from patients and caregivers (e.g. SDS)
- examination
  - physical including cardiovascular and neurological systems
  - mental state and cognition (e.g. ECAQ/ MMSE and GDS-4)

Abnormalities detected on clinical assessment

- NO: Provide reassurance
- YES: Perform laboratory test

Any abnormalities present?

- NO: Do the findings meet criteria for dementia?
- YES: Treat and reassess

Do the findings meet criteria for dementia?

- NO: Do symptoms remain?
- YES: Is the patient cognitively impaired but not demented

Is the patient cognitively impaired but not demented

- NO: Provide reassurance or referral as appropriate
- YES: Refer to specialist services/memory clinics

Consider referral to a specialist and/or reassess in 6 months

Screening tests: FBC, Renal profile, Ca, LFT, Folate, B12, TFT, UFEME, RBS/FBS, Lipid profile.

Specific test guided by clinical presentation: VDRL, HIV, etc.
PATIENT WITH DEMENTIA

Pharmacological Intervention

Mild to moderate
• AChEI e.g. donepezil

Moderate to severe
• May consider AChEI e.g. donepezil

Behavioral and Psychological Symptoms of Dementia (BPSD)

• Depression
• Anxiety
- Psychosocial intervention is the first line treatment
- Antidepressant in depressed patients
- Consider anxiolytic in patients with severe anxiety symptoms

Agitation
• Psychosocial intervention is the first line treatment
- Consider antipsychotics if symptoms are distressing and other treatment measures failed. Avoid in DLB

Aggression

Psychosis

Multidisciplinary team assessment

Activities to promote independence

Co-morbid emotional disorders

• Depression
• Anxiety

Maintenance of functions

Psychosocial Intervention (as tailored to individual’s needs)

Maintenance of cognitive function

Treat vascular risk factors e.g. antihypertensive, antiplatelet, antiplatelet, anti-diabetic and anti-platelet

Maintenance of functions

Activities to promote independence

ACHeI

Frontotemporal dementia

Dementia of Lewy Body (DLB), Parkinson Disease Dementia

Consider rivastigmine

Acetylcholineesterase inhibitors (AChEIs)
<table>
<thead>
<tr>
<th>MANAGEMENT OF DEMENTIA</th>
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<tbody>
<tr>
<td><strong>NON-PHARMACOLOGICAL</strong></td>
</tr>
<tr>
<td>Promoting independence</td>
</tr>
<tr>
<td>• Communication</td>
</tr>
<tr>
<td>• ADL skill training</td>
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<tr>
<td>• Telecare/adaptive aids</td>
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<tr>
<td>• Exercise</td>
</tr>
<tr>
<td>• Rehabilitation programme</td>
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<tr>
<td>• Combination</td>
</tr>
<tr>
<td>Maintenance of cognition</td>
</tr>
<tr>
<td>• Reality therapy</td>
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<tr>
<td>• Validation</td>
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<tr>
<td>• Life review</td>
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<tr>
<td>Challenging behaviours</td>
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<tr>
<td>• Behaviour management</td>
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<tr>
<td>• Music</td>
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<tr>
<td>• Reminiscence therapy</td>
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<tr>
<td>Reduction of co-morbid emotional problem (e.g., Depression and anxiety)</td>
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Note: For the treatment of depression in dementia, refer to Clinical Practice Guidelines Management of Major Depressive Disorder (MDD), 2007 on page 21-24.
### Suggested Drug Dosages and Adverse Effects for Dementia

<table>
<thead>
<tr>
<th>Name</th>
<th>Starting Dose</th>
<th>Maximum Dose</th>
<th>Renal Failure</th>
<th>Hepatic Insufficiency</th>
<th>Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive Enhancers</strong></td>
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<tr>
<td>Donepezil</td>
<td>5 mg daily</td>
<td>10 mg daily</td>
<td>No adjustment</td>
<td>No adjustment</td>
<td>Gastrointestinal: Diarrhoea, loss of appetite, nausea, vomiting</td>
</tr>
<tr>
<td>Rivastigmine</td>
<td>1.5 mg bd</td>
<td>6 mg bd</td>
<td>No adjustment</td>
<td>No adjustment</td>
<td>Musculoskeletal: Osteoporosis, insomnia</td>
</tr>
<tr>
<td>Rivastigmine patch</td>
<td>4.6 mg daily</td>
<td>9.5 mg daily</td>
<td>No adjustment</td>
<td>No adjustment</td>
<td>Others: Fatigue, Transdermal patch, skin irritation</td>
</tr>
<tr>
<td>Galantamine</td>
<td>4 mg bd</td>
<td>16 mg bd</td>
<td>Reduce dose</td>
<td>Reduce dose</td>
<td></td>
</tr>
</tbody>
</table>

**Precautions in AchEIs use**
- Anaesthesia with succinylcholine
- Asthma or obstructive pulmonary disease
- Cardiac conduction abnormalities (SVT, AV block)
- Urinary obstruction/frequency

**Memantine**
- 5 mg daily
- 10 mg bd

- If creatinine clearance < 30 ml/min, 5 mg bd
- No information

**Precautions in Memantine use**
- Concomitant use of drugs that make the urine alkaline
- Concomitant use of other NMDA antagonists
- Genitourinary conditions
- Moderate to severe renal impairment
- Seizure disorder

**Atypical Antipsychotics**

<table>
<thead>
<tr>
<th>Name</th>
<th>Starting Dose</th>
<th>Maximum Dose</th>
<th>Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risperidone</td>
<td>0.5 mg daily</td>
<td>2 mg daily</td>
<td>Hyperprolactinemia, weight gain, extrapyramidal syndrome, akathisia, insomnia, somnolence.</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>2.5 mg daily</td>
<td>10 mg daily</td>
<td>Peripheral oedema, hyperglycaemia, xerostomia, hyperprolactinemia, increased appetite &amp; weight gain, extrapyramidal syndrome, abnormal gait, akathisia, anataxia, somnolence.</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>12.5 to 50 mg daily</td>
<td>200 to 300 mg daily</td>
<td>Orthostatic hypotension, tachycardia, hyperprolactinemia, xerostomia, weight gain, constipation, increased appetite, anataxia, extrapyramidal syndrome, insomnia, sedation, somnolence, agitation, fatigue.</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>5 mg daily</td>
<td>15 mg daily</td>
<td>Weight gain, constipation, nausea &amp; vomiting, akathisia, extrapyramidal syndrome, insomnia, sedation, somnolence, tremor, anxiety, restlessness, fatigue.</td>
</tr>
</tbody>
</table>

**Precautions in atypical antipsychotics use**
- Increased risk of death which are attributed to cardiovascular events (e.g., heart failure or sudden death) or infections (e.g., pneumonias)
- Cerebrovascular adverse events (stroke, transient ischemic attack), including fatalities

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