Dementia Recognition and Diagnosis in Primary Care

The Toolkit That You Really Wanted
Assessment Process Summary

• Determine whether there is a history of cognitive decline
• Determine whether there is a history of functional decline
• Determine whether there are any atypical dementia features
• Exclude mimic conditions
• Confirm cognitive impairment
• Diagnose or refer for diagnosis
What is Dementia?

• Decline in multiple areas of higher brain function
• Decline in functional independence
• Due to physical brain disease
Clinical Presentations

• Complaint of cognitive or functional decline from patient or informant
• Difficulty giving a history, or overt cognitive impairment at interview
• Report or evidence of behavioural change
• Decline in appearance or loss of weight
• New onset depression, anxiety or psychosis
• Decline in illness self-management skills
Diagnosis is a Simple 4 Stage Process

1. Determine whether there has been a decline in higher brain function
2. Determine whether there has been a decline in functional independence
3. Determine whether this is likely due to physical brain disease
4. Determine likely nature of brain disease
Has There Been a Decline in Higher Brain Function?

• Is there a history suggestive of decline in higher brain function?
• This is usually a decline in cognition but sometimes the change may be behavioural
• The patient can often describe this
• However it is always a good idea to confirm with an informant
Informant Questions for Cognitive Decline

• Does (P) have a problem with their memory?
• Does (P) ever have difficulty finding the right word?
• Does (P) ever seem disorientated or confused?
• How did the problem start?
• How long has this been present?
• Is it getting worse?
• Are things getting slowly worse or are there more sudden changes?
Has There Been a Decline in Functional Independence?

• This is an essential requirement for a dementia diagnosis
• The information is best obtained from an informant
• If there is no significant functional decline the descriptor is mild cognitive impairment
• More complex activities such as managing finances tend to be affected first
Informant Questions for Functional Decline

• Do the problems that you have told me about interfere with (P)s ability to manage in everyday life?
• Are there things that (P) is less good at now?
• Are there things that you need to help with?
• What about: driving, finances, shopping?
• Would you be happy to leave (P) to manage on their own for a couple of weeks?
• Are there any risks?
Informant Questions for Atypical Dementia

• Does (P) ever see things that are not there?
• Does (P) hit out whilst asleep?
• Does (P) seem vacant or sleepy during the day?
• Has (P) started to complain of a headache?
• Has (P) had any fits or seizures?
• Has (P)’s behaviour changed significantly?
• Consider patient has any neurological abnormalities not explained by strokes (e.g. parkinsonism, urinary incontinence, gait apraxia)
Is Problem Likely to be Due to Physical Brain Disease?

• This is a clinical judgement based on what you know about the patient
• Ideally you would like to see an image of the brain to prove this
• However all you need to do is to sensibly exclude other things that can mimic dementia
• The presumption is then that a brain disease is the likely cause
Exclude the 3D’s!

1. Delirium
2. Depression (mental disorder)
3. Drugs (including alcohol)
Identifying the 3D’s

1. Is patient acutely physically ill? Has problem developed rapidly? Does patient appear confused or drowsy?

2. Does patient appear depressed? Does patient have a past history of severe mental illness?

3. Has patient recently started any medicines known to impair cognition? Is there any evidence of alcohol misuse?
Confirm Cognitive Impairment

• There is a history suggestive of cognitive and perhaps functional decline which you judge is likely to be due to physical brain disease
• You should now confirm that patient is actually cognitively impaired on a test
• We suggest using 6CIT or Mini-Cog
• Alternative brief tests are outlined in the appendix
## 6-Item Cognitive Impairment Test (6CIT)

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>What year is it?</td>
<td>Incorrect = 4</td>
</tr>
<tr>
<td>What month is it?</td>
<td>Incorrect = 3</td>
</tr>
<tr>
<td>Remember this name and address John Smith 42 High Street Bedford. Please repeat it.</td>
<td>Not scored</td>
</tr>
<tr>
<td>About what time is it?</td>
<td>Incorrect = 3</td>
</tr>
<tr>
<td>Count backwards from 20 to 1</td>
<td>1 error = 2</td>
</tr>
<tr>
<td></td>
<td>&gt; 1 error = 4</td>
</tr>
<tr>
<td>Say the months of the year in reverse</td>
<td>1 error = 2</td>
</tr>
<tr>
<td></td>
<td>&gt; 1 error = 4</td>
</tr>
<tr>
<td>What was the name and address I asked you to remember?</td>
<td>1 error = 2</td>
</tr>
<tr>
<td></td>
<td>2 errors = 4</td>
</tr>
<tr>
<td></td>
<td>3 errors = 6</td>
</tr>
<tr>
<td></td>
<td>4 errors = 8</td>
</tr>
<tr>
<td></td>
<td>5 errors = 10</td>
</tr>
</tbody>
</table>

**6CIT Score**

/28 (> 7 = abnormal)
Mini-Cog

• I want you to remember 3 words. Repeat them so I know you have heard me.

• Banana, Sunrise, Chair

• Draw a clock face and put the numbers in the right place. Set the hands to 10 past 5

• What were the 3 words I asked you to remember?
Mini-Cog Scoring

- 3 recalled words
  - Negative for cognitive impairment
- 1-2 recalled words + normal CDT
  - Negative for cognitive impairment
- 1-2 recalled words + abnormal CDT
  - Positive for cognitive impairment
- 0 recalled words
  - Positive for cognitive impairment
Blood Tests

- FBC
- ESR or CRP
- U+E / Ca
- LFT (GGT)
- TFT
- HbA1C / Blood sugar
- B12 / Folate
Likely Dementia: What to do Next

• You now have a history suggestive of cognitive decline and possibly functional decline
• You think this is likely due to brain disease
• Patient has performed below expectation on your preferred cognitive test
• Should you make the diagnosis?
• If not then where to refer?
Simple Case - GP Diagnosis

- Older person (> 80 years)
- Clear progressive decline in cognition
- Clear progressive decline in function
- Decline duration longer than 12 months
- Clear abnormal performance on cognitive test
- Not likely to be dementia mimic (3D’s)
- No atypical dementia features
- GP can safely diagnose dementia
GP Diagnosis Subtype

- Slow onset, gradual progression, initial or main symptom impaired memory
- Sudden onset in relation to stroke, worse in steps related to further strokes
- Mixture of above

- Diagnosis Dementia due to Alzheimer’s disease (EU00)
- Diagnosis Vascular Dementia (EU01)
- Diagnosis Mixed Dementia (EU002)
Complex Case - Refer to MAS

- Younger person (<75)
- Uncertain dementia including MCI
- Possible mental illness mimic
- Atypical dementia
- Apparent dementia in those who do not speak good English
- Apparent dementia in those with possible learning disability
Risky Case - Refer to Neurology / Medicine

- New conspicuous headache!!
- Rapid onset dementia (< 3 months)!!
- Recent onset seizures / myoclonus!!
- Focal neurological signs not likely due to stroke disease!!
- Possible delirium!!
MAS Referrals

- Inform patient / carer of the referral
- Provide clear informant contact details
- State main problem and duration of decline
- Enclose computerised medical history
- Enclose details of current medication
- Enclose recent blood results
- Tell us if an interpreter is needed
Potential Benefits of MAS Referral

• Timely accurate diagnosis
• Useful information on prognosis
• Functional assessment including safety and RDAC
• Reversal of remediable causes
• Treatment with anti-dementia drugs
• Access to clinical genetics
• Treatment with appropriate non-pharmacological therapies
• Participation in clinical trials
• Information on affairs management
• Access to support services and benefits
• Dementia Advisors
• Admiral Nurses
Remember

• Diagnosing dementia is easy
• Just 4 questions to answer!
  1. Has there been a decline in some aspect of higher brain functioning?
  2. Has there been a decline in functionality?
  3. Is this most likely due to brain disease?
  4. What is the likely nature of brain disease?
• Simple case - GP diagnosis
• Complex case – specialist diagnosis
Appendix

Brief Cognitive Tests
Brief Cognitive Tests

- Assess a limited range of functions
- Quick to administer
- Compare performance to Mr or Mrs ‘Average’
- Cut offs are available
- They are not ‘Dementia Tests’ and should simply be used to confirm cognitive impairment
- Do not use them as screening tests
Free to Use Cognitive Tests

- **6CIT** (www.patient.co.uk/doctor/six-item-cognitive-impairment-test-6cit)
- **Mini-Cog** (http://geriatrics.uthscsa.edu/tools/MINICog.pdf)
- **GPCOG** (www.gpcog.com.au)
- **MOCA** (www.mocatest.org)
- **M-ACE** (www.neura.edu.au/frontier/research/test-downloads/)
- **AMT** (www.patient.co.uk/doctor/Abbreviated-Mental-Test-(AMT).htm)
Which Test to Use?

- General purpose ➢ 6CIT, Mini-Cog, GP-Cog
- High IQ, Atypical presentation ➢ MOCA, M-ACE
- More severely impaired, Nursing home ➢ AMT
- Visually impaired ➢ 6CIT, AMT
DIY Testing

• Put 3-5 common objects on your desk
• Ask patient to name and remember them
• Put them out of sight
• Ask patient to draw large clock face, put all the numbers in and set hands to 10 past 5
• Ask patient to recall the objects
• Make your own judgement on whether normal for patient’s background
# Geriatric Depression Scale (GDS)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you basically satisfied with your life?</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Do you feel that your life is empty?</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Are you afraid that something bad is going to happen to you?</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Do you feel happy most of the time?</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>&gt; 1 = Depressed</strong></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>