



# Dementia Recognition and Diagnosis in Primary Care

The Toolkit That You Really Wanted



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Memory Assessment Service (MAS)

# 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)

Question	Score
What year is it?	Incorrect = 4
What month is it?	Incorrect = 3
Remember this name and address John Smith 42 High Street Bedford. Please repeat it.	Not scored
About what time is it?	Incorrect = 3
Count backwards from 20 to 1	1 error = 2 > 1 error = 4
Say the months of the year in reverse	1 error = 2 > 1 error = 4
What was the name and address I asked you to remember?	1 error = 2 2 errors = 4 3 errors = 6 4 errors = 8 5 errors = 10
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
  - Diagnosis Dementia due to Alzheimer's disease (EU00)
- Sudden onset in relation to stroke, worse in steps related to further strokes
  - Diagnosis Vascular Dementia (EU01)
- Mixture of above
  - 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](http://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](http://www.gpcog.com.au))
- **MOCA** ([www.mocatest.org](http://www.mocatest.org))
- **M-ACE** ([www.neura.edu.au/frontier/research/test-downloads/](http://www.neura.edu.au/frontier/research/test-downloads/))
- **AMT** ([www.patient.co.uk/doctor/Abbreviated-Mental-Test-\(AMT\).htm](http://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)

Question	Yes	No	Score
Are you basically satisfied with your life?	0	1	
Do you feel that your life is empty?	1	0	
Are you afraid that something bad is going to happen to you?	1	0	
Do you feel happy most of the time?	0	1	
Total			> 1 = Depressed