Cognitive assessment for HHW 4, Neurology GP session, 19/3/26

Pre-reading given to students

You will cover in your case that it is common for patients to the complain about memory impairment. Sometimes the patient presents with concerns about their memory, but often it is a family member who is worried. Mild cognitive impairment has many causes and should be tested for. This enables forward planning but also to look for reversible causes, cognitive decline can put the patient and others at risk, for example leaving the gas on after cooking. Mild impairment can precede serious cognitive decline in dementia by many years. Causes include dementia, head injuries, Parkinson's, endocrine disorders e.g. hypothyroidism, metabolic e.g. hypoglycaemia, nutritional deficiencies e.g. folate and vitamin B12, sedative medication, depression, and infections.

There are different parts to assessing cognitive function, a history including collateral history, mental state examination, physical examination, and formal cognitive testing with a standardised test.

Most frequently used in UK general practice is the GPCOG score which was developed in Australia. It was designed to screen for cognitive impairment in primary care: it has 2 parts, first an assessment of the patient's cognitive function, then if their score is uncertain e.g. 5-8 there are further questions to ask someone who knows them (a collateral history or "informant"). You can read about it and see the test online here. It is available in a number of languages.

The mini mental state examination(MMSE) is a commonly used test of cognitive function that scores out of 30. It tests orientation, short term memory, visuospatial and language skills and is thought to be sensitive (it picks up mild impairment) but not suitable for making a diagnosis. It needs to be purchased and can't be reproduced, but you can read more about it here.

The Montreal Cognitive Assessment (Moca) is rapid screening instrument for mild cognitive dysfunction. It assesses different cognitive domains: attention and concentration, executive functions, memory, language, visuospatial skills, conceptual thinking, calculations, and orientation. It scores out of 30 with 26 and above being normal. http://www.mocatest.org/

The "Six-item Cognitive Impairment test" (6CIT) can be used to screen for cognitive impairment. It is complicated to score, but sensitive and still specific, and easy to translate to different languages and cultures (note this is not true of the AMT which needs questions adapting).

	SIX-ITEM COGNITIVE IMPAIRMENT TEST (6CIT) --Kingshill version 2000	Score if incorrect. (0= correct)
1	What year is it?	4
2	What month is it?	3
3	Give a 5-part address for patient to remember e.g. John Smith, 42 West Street, Birmingham.	
4	What time is it? (To nearest hour)	3
5	Count backwards from 20	1 error= 2 points 2 + errors = 4 points
6	Say the months of the year in reverse	1 error = 2 points. 2 + errors = 4 points
7	Repeat address phrase	Score on number of errors 1 = 2 points . 2 = 4 points . 3 =6 points . 4 = 8 points. All wrong= 10 points
SCORE	0-7 normal. 8 or more significant.	Total: 28

The abbreviated mental test score (AMTS) was introduced by Hodkinson in 1972[2] to assess patients for the possibility of dementia. You may see it in hospital, but it hasn't been validated for screening or use in primary care. It's simple and easy to score but over time the questions get adapted e.g. 2nd world war for dates and name the prime minister rather than monarch – so it is not very valid. In addition, questions often need adapting for patients depending on background and culture.

Put the following questions to the patient. Each question correctly answered scores one point, a score of 6 or less indicates dementia or delirium and indicates further testing.

	Abbreviated mental test score (AMTS)	Score if incorrect is 0 (Score 1 if correct)
1	What is your age?	0/1
2	What is the time? (to the nearest hour)	0/1
3	Give the patient an address, and ask him or her to repeat it e.g. 42 West Street (tell the patient you will ask them to remember it and ask them at the end of the test. No points for repeating—this is to check they've heard right)	
4	What is the year?	0/1
5	What is the name of this place? (the hospital or number of the residence where the patient is?)	0/1
6	Identification of 2 people. Can the patient recognize two of: family member, doctor, carer, etc.)	0/1
7	What is your date of birth? (day and month sufficient)	0/1
8	In what year did World War 1 begin?	0/1
9	Name of present monarch?	0/1
10	Count backwards from 20 down to 1.	0/1
11	Address recall	0/1
	Score: 6	10

1. Brooke P, Bullock R; Validation of a 6-item cognitive impairment test with a view to primary care usage. *Int J Geriatr Psychiatry*. 1999 Nov 14 (11): 936-40.
2. Hodkinson MH; Evaluation of a mental test score for assessment of mental impairment in the elderly, *Age and Ageing*, Volume 1, Issue 4, November 1972, Pages 233 – 238, https://doi.org/10.1093/ageing/1.4.233

Advanced learning activity

Please watch this 5-minute video in advance of the session. This is not a full consultation but is a real consultation carried out at Horfield Medical Centre, here in Bristol, and shows a GP assessing a patient with memory problems.
The clip is available
at: https://mediasite.bris.ac.uk/Mediasite/Play/759f68d8390d41139040ce2d4a4dbc8d1d

Please use the consultation observation questions in the table below to make some notes about each phase of COGConnect that you observe in this consultation. Think about aspects of the GPCOG that you practised in your EC lab and whether any of the other tools to assess cognition would have felt more appropriate here. You should watch the consultation again in your GP session, so please be prepared to discuss this with your GP teacher.

COGConnect Phase	**Questions to consider whilst watching the video**	**Space for your notes**
Preparing	Pause the video and look at the way the room is set up for consulting. What do you notice?	
Opening	How does the Doctor open the consultation? What do you notice about the patient's response?	
Gathering	*This consultation is edited for TV and is therefore shorter than a normal consultation and some of the memory assessment is missing.* Despite that, what do you notice about the information gathered? What are the patient's ideas about his memory problems (what does he think might be causing them)? What are the patient's worries about this situation? What aspects of a patient's lifeworld might be important where memory is a problem? How do we 'examine' memory? What other information gathering can you identify?	
Formulating	What does the doctor think is going on here?	

Explaining	Can you identify any explaining in this consultation? If so, does it take account of the patient's understanding?	
Activating	Do you notice any activating in this consultation? What aspects of lifestyle might be important for a patient with memory problems?	
Planning	Can you identify a clear management plan? What do you think the pitfalls might be?	
Closing	How does the doctor close this consultation?	
Integrating	What does the doctor need to do now to appropriately integrate this consultation? How do patients integrate new information about their health, or new potential diagnoses? What might this patient do now? What might the emotional impact of this consultation be for the doctor? What might the emotional impact of this consultation be for the patient and his wife?	
Generic Consulting skills	Note down the skills you observe being used in this consultation	

There is a lot of useful info here. http://gpcog.com.au/index/frequently-asked-questions

Read through the FAQs especially the information about what to keep in mind when administering GP COG.