

Diagnostic Practice

Getting from here to there

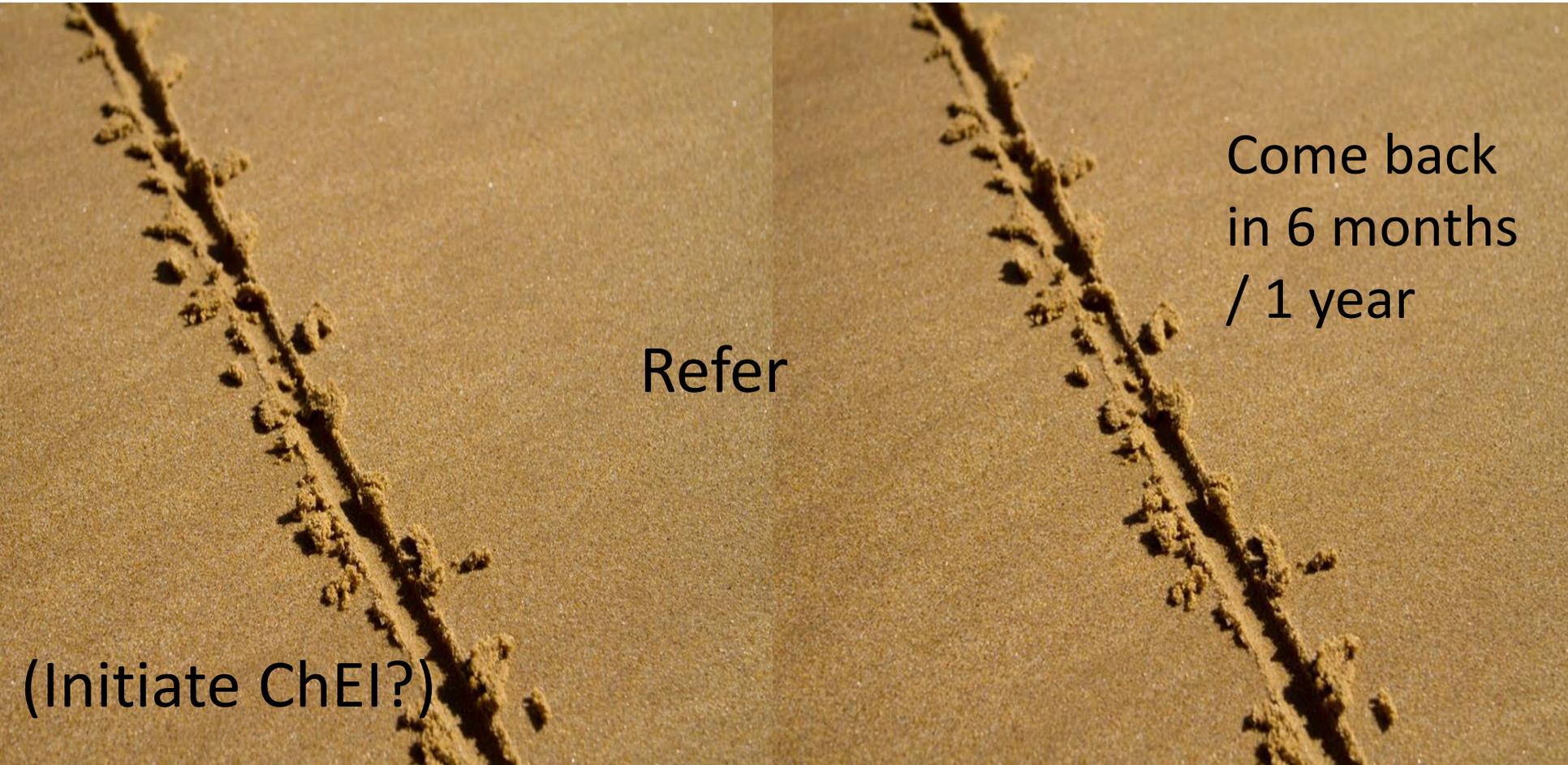
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Purpose of session

- Diagnostic drift
 - No clinically available biomarkers
 - Variation in judgements

GP task



Refer

Come back
in 6 months
/ 1 year

(Initiate ChEI?)

GP task

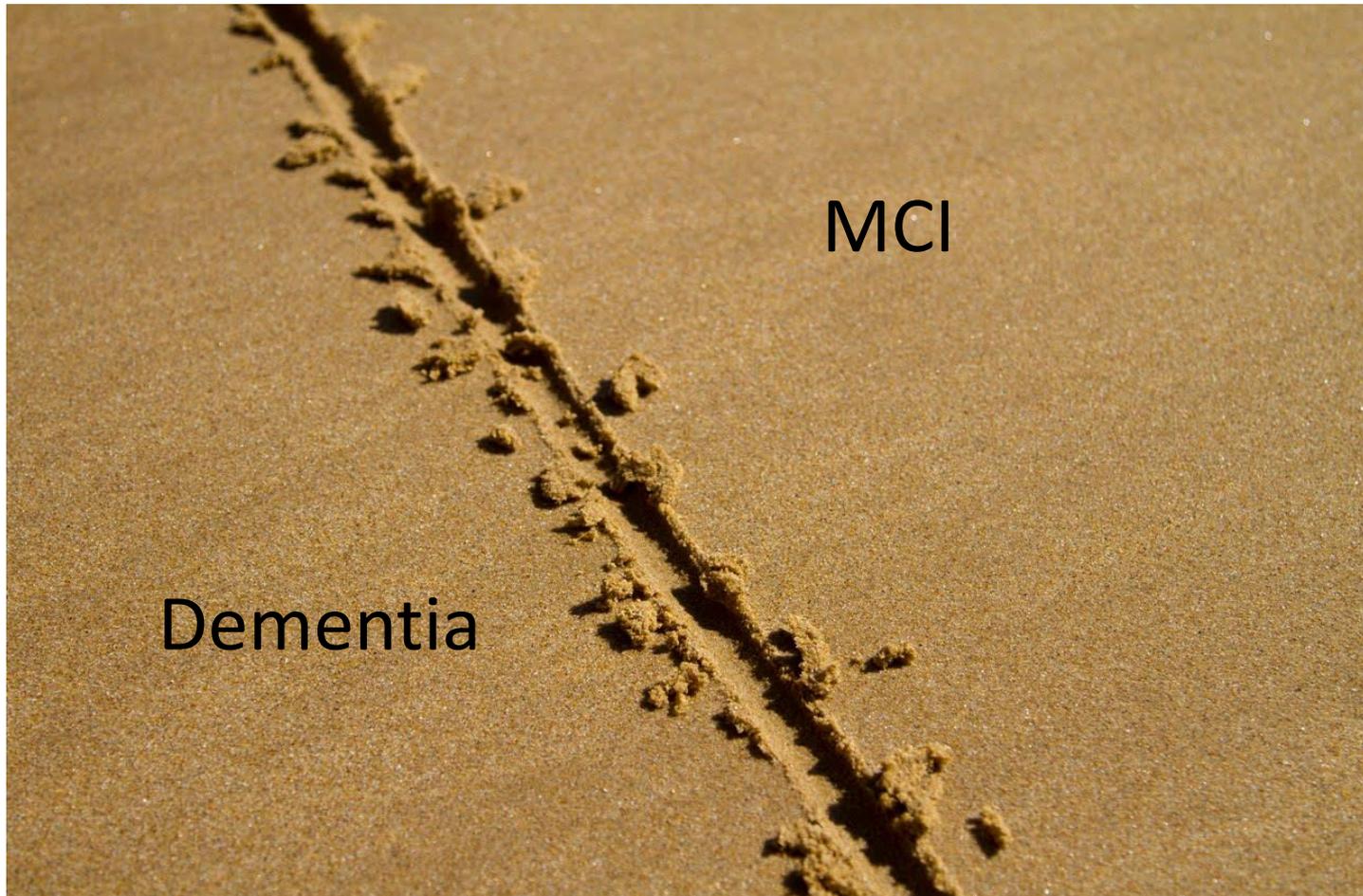
Refer

?when ChEI indicated
?when it will help

Come back
in 6 months
/ 1 year

(Initiate ChEI?)

The memory clinic task (1)



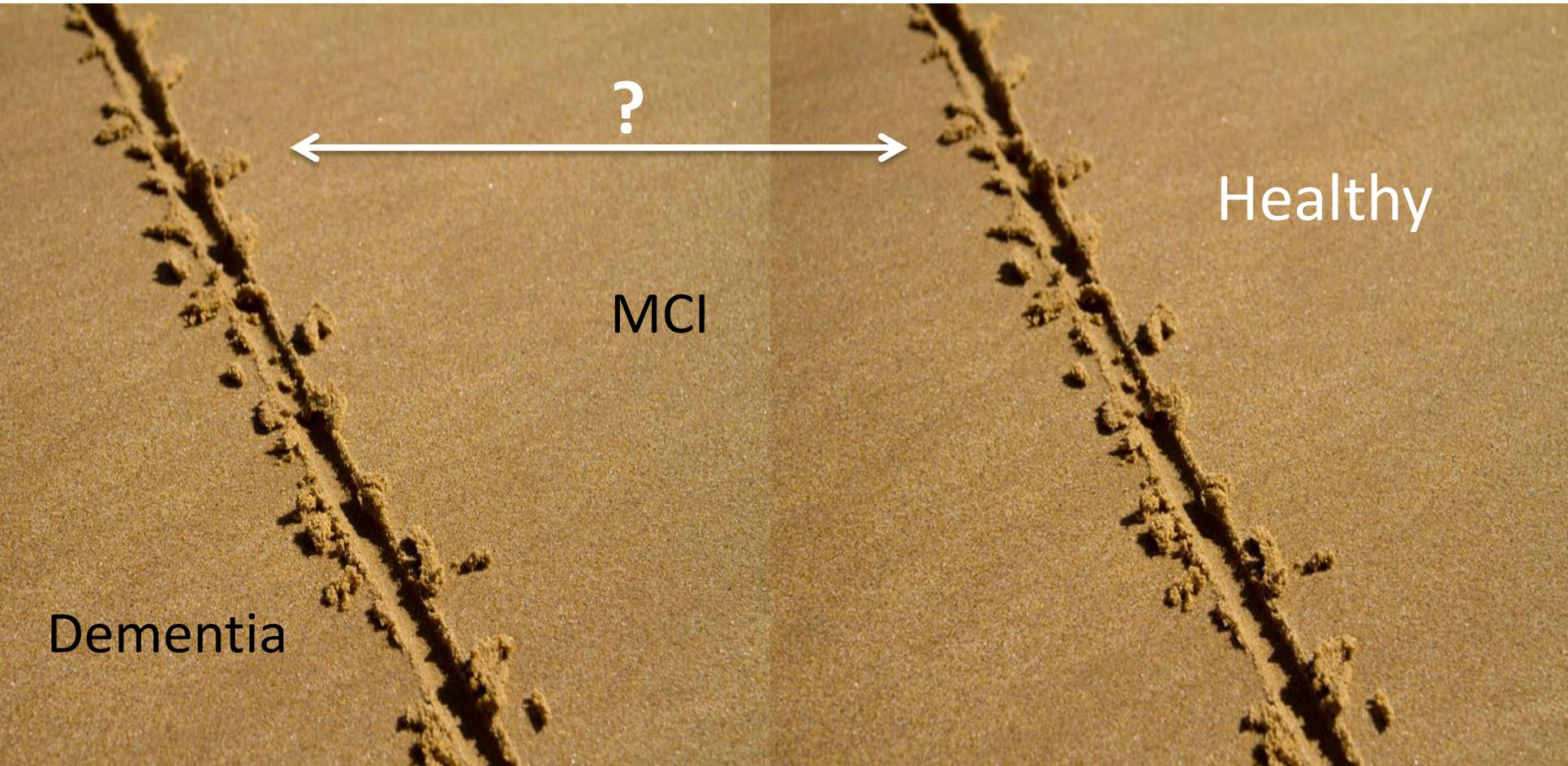
The memory clinic task (2)



Come back
in 6 months
/ 1 year

Treat with ChEI

Memory clinic task (3)



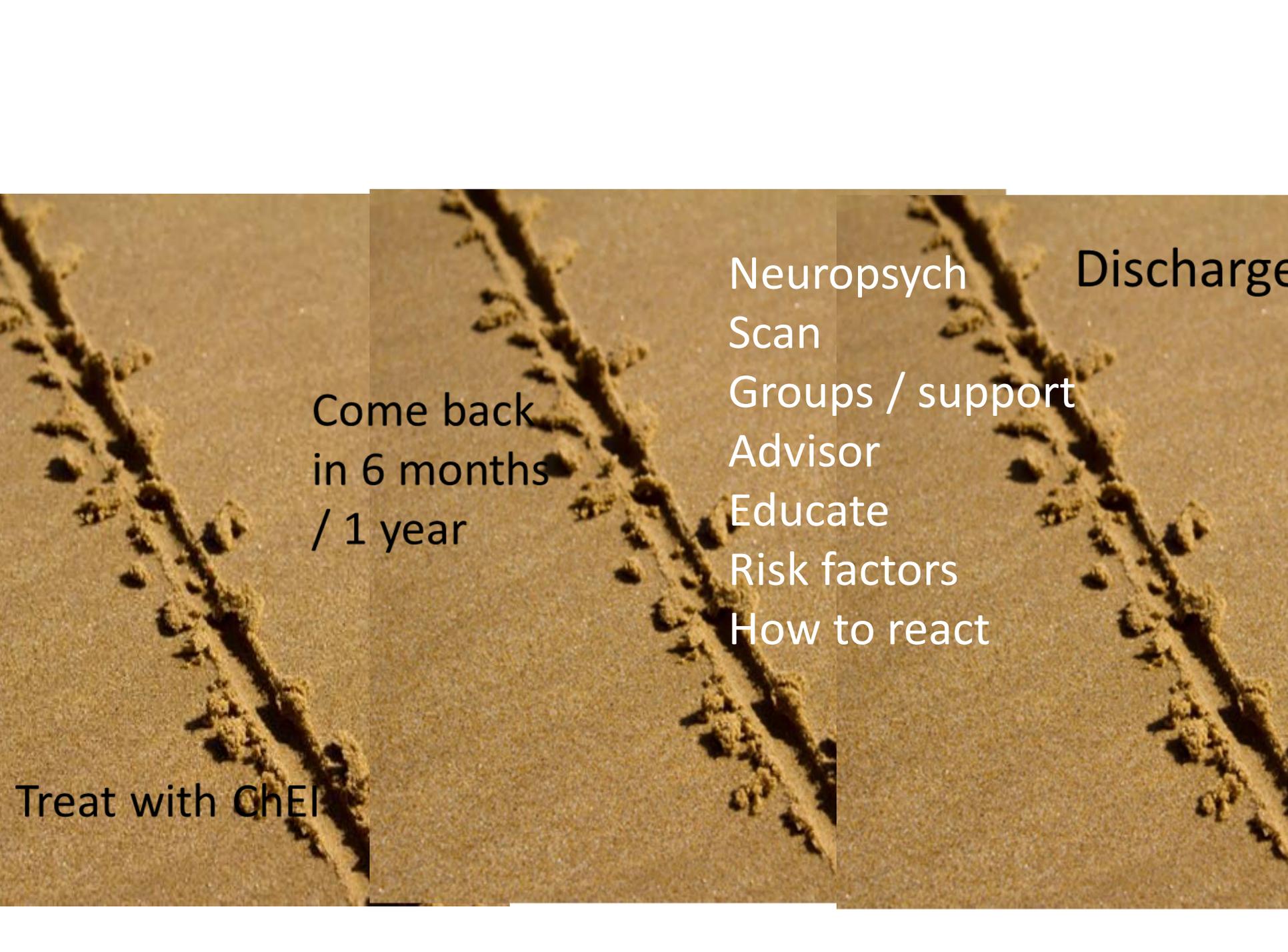
Memory clinic task (3)



Treat with ChEI

Come back
in 6 months
/ 1 year

Discharge



Come back
in 6 months
/ 1 year

Neuropsych
Scan
Groups / support
Advisor
Educate
Risk factors
How to react

Discharge

Treat with ChEI

Today's Task

- Compare your practice in managing early cognitive impairment
 - Sequentially adding information

What is MCI

- Mild Cognitive Impairment
- First used 1990
- 1998 – Petersen
- ‘Patients who meet the criteria for MCI can be differentiated from healthy control subjects and those with very mild AD. They appear to constitute a clinical entity that can be characterized for treatment interventions’.

Domain deficits (2 needed for dementia) NIA-AA (2011)

- Memory
 - Repetitive questions and conversations
 - Losing things
 - Forgetting events or appointments
 - Getting lost on familiar route
- Reasoning
 - Safety risks
 - Managing finances
 - Poor decision making
 - Planning complex or sequential activities

- Visuospatial
 - Recognising faces, common objects
 - Finding objects in direct view
 - Operating simple implements
 - Orienting clothing to body
- Language
 - Word finding
 - Hesitations, speech spelling and writing errors

- Personality & behaviour
 - motivation, initiative, apathy, drive,
 - social withdrawal
 - decreased interest in previous activities,
 - loss of empathy, compulsive or obsessive behaviors, and socially unacceptable behaviors

MCI vs prodromal AD

- Prodromal AD
 - (International Working Group, Dubois)
 - Intended for research
 - Requires biomarkers
- MCI
 - (National Institute for Ageing – Alzheimer’s Association)
 - Intended for clinical application
 - Only one domain cognitive impairment
 - 1-1.15 SD below age and educational adjusted norms
 - Degree of functional impairment
 - ‘generally mild functional impairment for complex tasks, but basic ADLs should be preserved’
 - No significant impairment in social or occupational functioning
 - Preservation of independence of functioning
 - How assessed, quality of caregiver response, nature of activities to interrogate

- Please vote if you diagnose or prescribe for dementia
- This is really difficult
 - Artificial
 - Threatening
- Work hard to imagine the patient in clinic
- Commit, using best judgement

Archetypal case

- 82y R handed housewife
- Last worked before her 3 children were born
- Only child. Parents died before 70y
- No family history of dementia
- Well managed vascular risks
- Statin and antihypertensive
- Successful hip operation 5 years ago
- Successful hearing aid
- Non-smoker, no alcohol
- Always shared tasks with husband
- Doesn't drive - husband always does it

Function

- Cooks and housework fine.
- Medication fine

- Opportunistic question at routine GP visit
- Occasionally muddles grandchildren (3) and great grandchildren (4)
- Lost interest in reading. No physical cause.

- MOCA 23/30
 - Trails – doesn't appear to understand
 - Clock OK
 - Date – out by a week
 - 0/5 free recall
 - 1 object on category cue, 3 on MCQ cue

CT/MRI

- ‘Mild periventricular white matter change. Age consistent atrophy’
- On review
 - L hippocampus normal
 - R hippocampus mildly atrophic

- Shopping list – less attention to what's in fridge
- Started using a calendar for birthdays

- Hopkins Verbal Learning Test 16/36
- 5,6,5 /12 words remembered at sequential iterations.
- Recognition OK

- Asked 4 times about an appointment

- Daughter thinks there's a problem
 - No longer the driving force
 - Patient more dependent (non-specific)
 - Father feeling the burden of helping

- Patient feels anxious and vulnerable

Determining factor?

Assumption: Main determinant is

- What will help the patient
- What will help the family

Rank the importance

- Prediction of pathology ('Diagnosis')
- Prediction of decline ('Prognosis')
- Chances of benefitting from ChEI
- Distress caused by diagnosis

Ignore

- Ticket to services / benefits
- Legal
 - Label less important for driving now
- What NICE / CCG says
- What my service / I can stand