Metro South Health

Dementia Echo

Determining Specific Dementia Diagnosis

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How to Diagnose Dementia

Clinical Syndrome

History and exam

Screening Tests

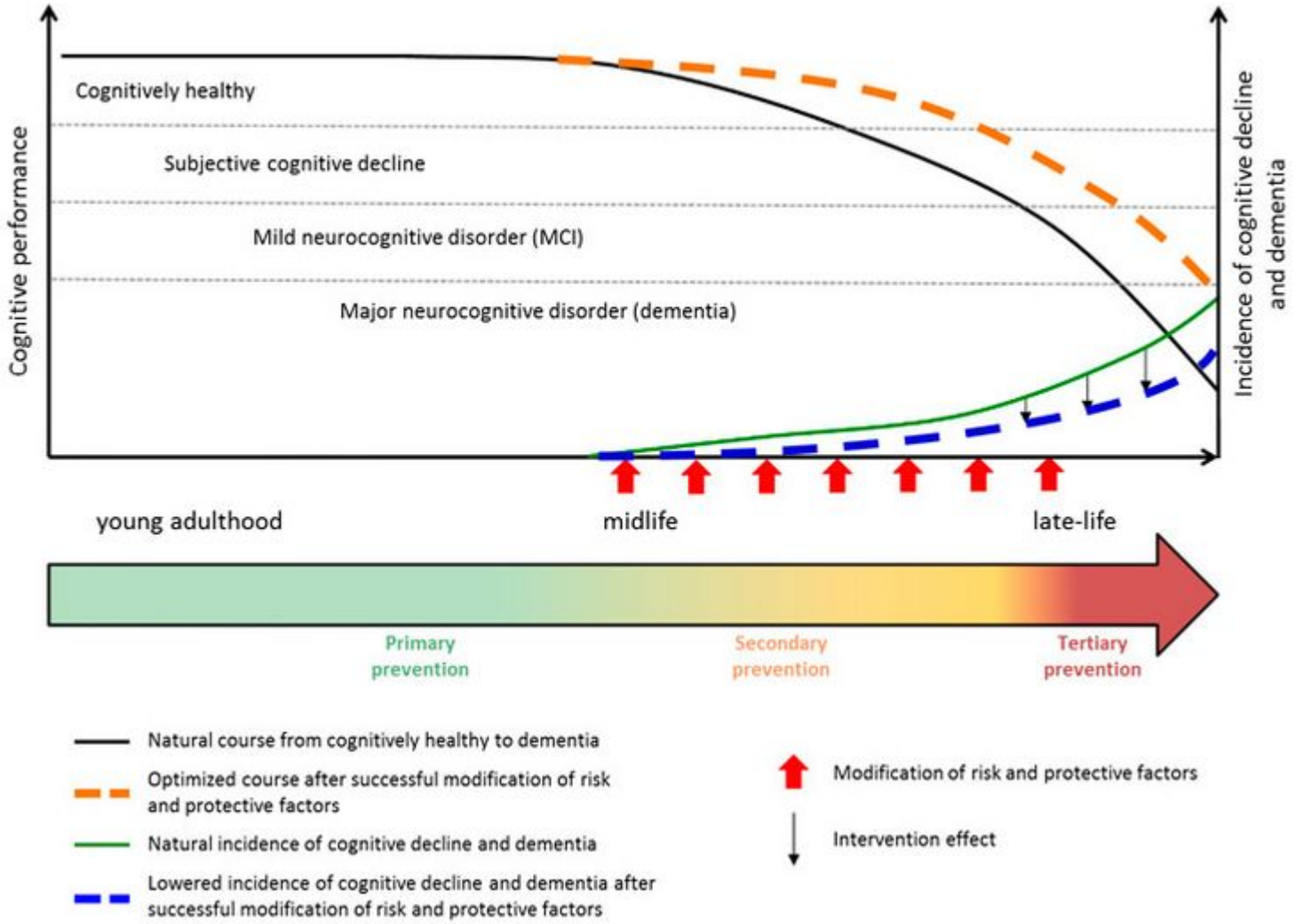
Investigations

Common subtypes

Common pitfalls

Questions

Cognitive Reserve Theory



Dementia Training Australia

Younger Onset Dementia

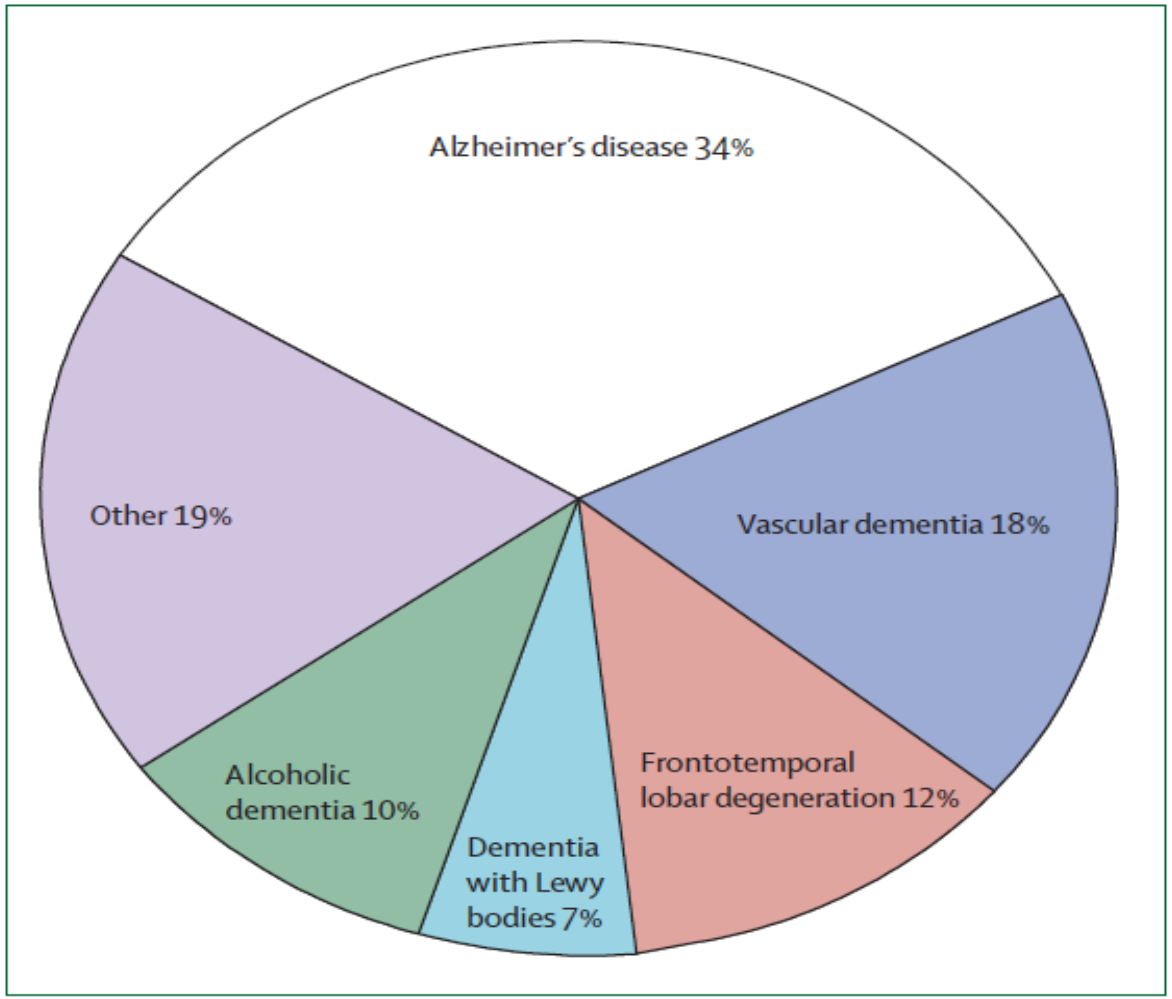


***Figure 1*: Epidemiology of young-onset dementia**
Data from the community study of Harvey and colleagues.[6]

Dementia Training Australia

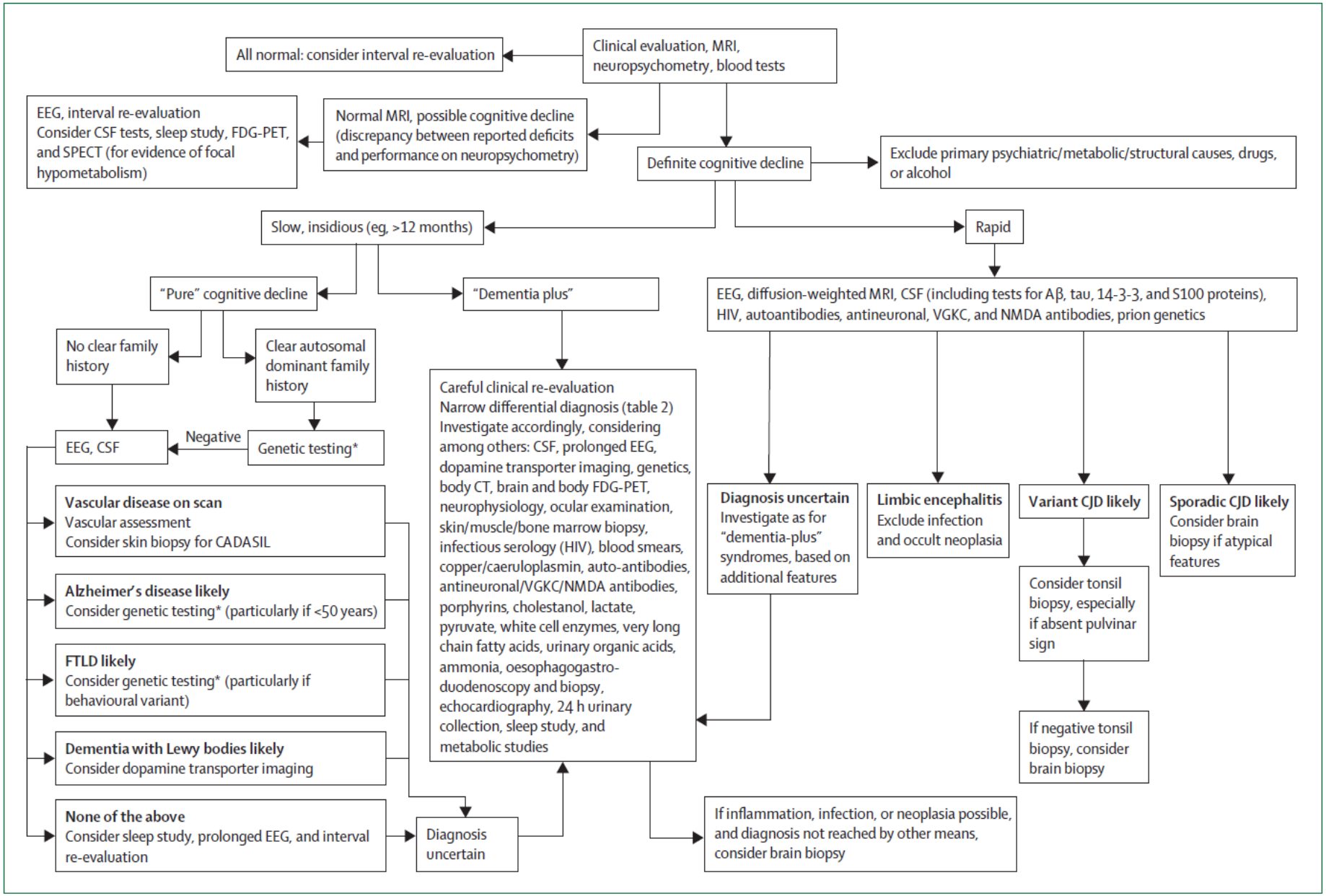


***Figure 3*: Flow chart for assessment and investigation of young-onset dementia**

This algorithm provides an overview of the diagnostic approach to patients with young-onset dementia. Given the many causes, this can only act as a general guide.*In amnestic young-onset dementia, first-line genetic testing is for *APP*, *PSEN1*, *PSEN2*, and prion. In behavioural cases, first-line testing is for *MAPT* (particularly if symmetrical atrophy on MRI) and *GRN* (particularly if asymmetric pattern of atrophy). EEG=electroencephalogram. FDG=fluorodeoxyglucose. SPECT=single photon emission computed tomography. Aβ=amyloid β. VGKC=voltage-gated potassium channel. FTLD=frontotemporal lobar degeneration. CADASIL=cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy. CJD=Creutzfeldt-Jakob disease.

Dementia Diagnosis

A. Evidence of significant cognitive decline from a previous baseline in one or more cognitive domains

B. Cognitive deficits interfere with independence in everyday activities

C. Deficits are not exclusively due to delirium

D. Not better explained by another mental disorder

Diagnosis

- Patient and informant history
- Brain imaging- CT, MRI, PET MRI
- Labs- FBC, Chem 20, B12, TFT, HIV, Syphilis, ESR
- Screening tools- AMT, MMSE, MOCA, RUDAS, KICA, ACE111
- Neuropsychology

- https://qheps.health.qld.gov.au/caru/networks/cognitive-impairment-toolkit
- QHEPS- Cognitive impairment toolkit

Taking the History

- Begins in the waiting room!

- Patient and a collateral history
- ? Structured questionnaire
- Begin with a conversation- open ended questions…

- Baseline
- Cognition
- Function
- Medications
- Psychiatric/ D&A hx
- PMH

Cognitive Domains

- Orientation and concentration
- Working/ episodic memory
- Remote memory
- Language
- Visuospatial
- Executive function
- BPSD

- Aphasia- loss or impairment of language due to brain damage
- Dysarthria – disorders of articulation (central or peripheral)
- Dyslexia- disorders of reading
- Agnosia – non recognition eg visual agnosia

Alzheimer's Disease(AD)

- Neurodegenerative disease
- Incidence increases with age
- Prominent working memory issues- rapid forgetting
- Cannot learn new information but remembers info from long ago
- Looses remote memory with time
- Language +/- visuospatial impairment
- Progresses over time 8-12 years

- MMSE

Vascular Dementia(VaD)

- More prominently effects executive function/ decision making
- Stepwise progression
- Can present as “flat”/ depressed or emotional labile
- In the presence of vascular risks- HTN, Stroke, IHD, DM etc
- Often mixed with AD
- Vascular gait in later stages

- MOCA

Lewy Body Dementia/ Parkinson's Dementia

- Less common
- All pts with PD eventually develop dementia
- Sleep disorders, constipation
- Fluctuations are prominent
- Early hallucinations – visual or auditory esp
- Early movement disorder- unilateral tremor, rigidity, bradykinesia (Slowing down) and falls
- Neuroleptic sensitivity
- Memory can be relatively preserved- screening tests can be N

Frontotemporal Dementia – Behavioural variant

- Less common
- Early change in behaviour and personality
- Loss of empathy or disinhibition
- Apathy and inertia
- Neglect and poor self care
- Stereotypic behaviours
- Change in eating habits
- Can look like psychiatric presentation
- Memory can be relatively preserved in early stages
- Cross over with MND

Frontotemporal Dementia- Language Variant

- Early language decline with function and memory preserved
- Testing looks worse than the patient presents- MMSE <15 but functional and continent
- Testing and dx difficult
- Semantic dementia- loss of memory for words
- Progressive non-fluent aphasia- loss of output, grammar, telegraphic speech

- Logopenic progressive aphasia- AD varient

Dementia Mimics

- Depression
- Untreated psychiatric disease
- Intellectual impairment
- Poor educational achievement
- CALD
- Medications
- Delirium
- Acquired brain injury

Things to look out for- Specialist review suggested

- Younger onset <65 year
- Rapidly progressive
- Early BPSD
- Early Language involvement or movement disorder
- Positive family hx- >2 relatives <65 years

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