Supplementary Material

Amnestic AD

Phenotype[1]

Progressive amnestic syndrome of the ‘hippocampal type’

Main neurodegenerative differential diagnoses (rare)[6]

- LATE
- PART
- FTLD-Tau (AGD)
- Atypical FTLD-Tau or TDP (17q21.31, MAPT, GRN, C9ORF72 mutations or GGT)
- Atypical LBD
- Atypical CTE
- Prion-associated diseases

Posterior Cortical Atrophy

Phenotype[2]

Progressive disturbance of visual ± other posterior cognitive functions

Main neurodegenerative differential diagnoses (rare)[6]

- LBD
- FTLD-Tau (CBD)
- Prion-associated diseases

Logopenic variant PPA

Phenotype[3]

Progressive impairment in single-word retrieval and in repetition of sentences

Main neurodegenerative differential diagnoses (rare)[6]

- FTLD-Tau (CBD) or TDP
- Atypical LBD
- Prion-associated diseases

Common AD phenotypes

Behavioural-dysexecutive variant

Phenotype[4]

- Progressive apathy or behavioural disinhibition and stereotyped behaviours
- or progressive predominant executive dysfunction

Main neurodegenerative differential diagnoses (frequent)[6]

- Behavioural AD: FTLD-Tau, TDP or FUS
- Dysexecutive AD: FTLD, LBD, Parkinson’s disease, PSP, CBD, Huntington’s disease…

Cortico-basal Syndrome

Phenotype[5]

Progressive asymmetric clinical presentation including limb rigidity or akinesia, limb dystonia, limb myoclonus, orobuccal or limb apraxia, cortical sensory deficit, alien limb phenomena

Main neurodegenerative differential diagnoses (frequent)[6]

- FTLD-Tau (CBD, PSP)
- FTLD-TDP
- Atypical LBD

Other variants of PPA

Phenotype[3]

Semantic or non fluent variants PPA

Main neurodegenerative differential diagnoses (frequent)[6]

- FTLD-Tau or TDP or FUS
- Atypical LBD
- Prion-associated diseases

Uncommon AD phenotypes

Figure caption

Supplementary Figure. Common and uncommon clinical phenotypes of Alzheimer's disease (AD) and the relative frequency of differential diagnoses for each phenotype (including only neurodegenerative diseases). Common phenotypes are phenotypes where AD is a common underlying pathology, while uncommon phenotypes are phenotypes where AD is not the most frequent underlying pathology. LATE = limbic-predominant age-related TDP-43 encephalopathy; PART = primary age-related tauopathy; AGD = argyrophilic grain disease; FTLD = frontotemporal lobar degeneration; LBD = Lewy body disease; CTE = chronic traumatic encephalopathy; PRNP = PRioN protein; CBD = cortico-basal degeneration; TDP = TAR DNA-binding protein; FUS = fused in sarcoma; PSP = progressive supranuclear palsy; PPA = primary progressive aphasia'

Supplementary Figure - References

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