



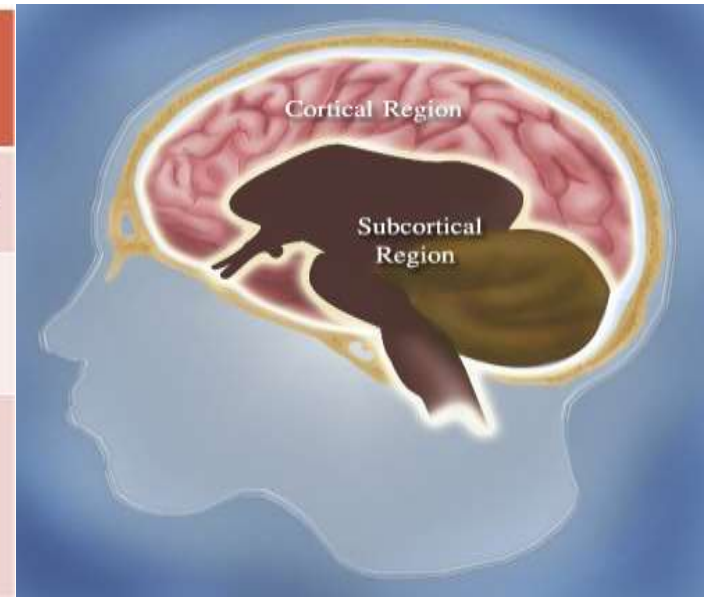
Dementia

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Types of dementia

- Reversible Vs irreversible
- Cortical Vs sub-cortical
- Degenerative Vs Non-degenerative

CORTICAL	SUBCORTICAL	MIXED
Alzheimer's	Parkinson's	Vascular Dementia
Frontotemporal Dementia	Huntington's disease	Lewy body dementia
CJD	Normal pressure hydrocephalus	Neurosyphilis



Cortical Vs Sub-cortical dementia

Feature	CORTICAL	SUBCORTICAL
Memory Impairment	Present	Minimal
Language deficits	Present	Absent
Speech	Normal	Dysarthria
Apraxia / Agnosia	Present	Absent
Psychomotor retardation	Absent	Present
Movement Disorder	Absent	Present
Gait / Coordination	Normal	Impaired
Apathy / Inertia	-	Present
Depression	-	+

Clinical subtypes of dementia

- Alzheimer's disease
- Vascular dementia
- Parkinson's disease
- Pick's disease
- Lewy body dementia
- CJD
- Dementia pugilistica



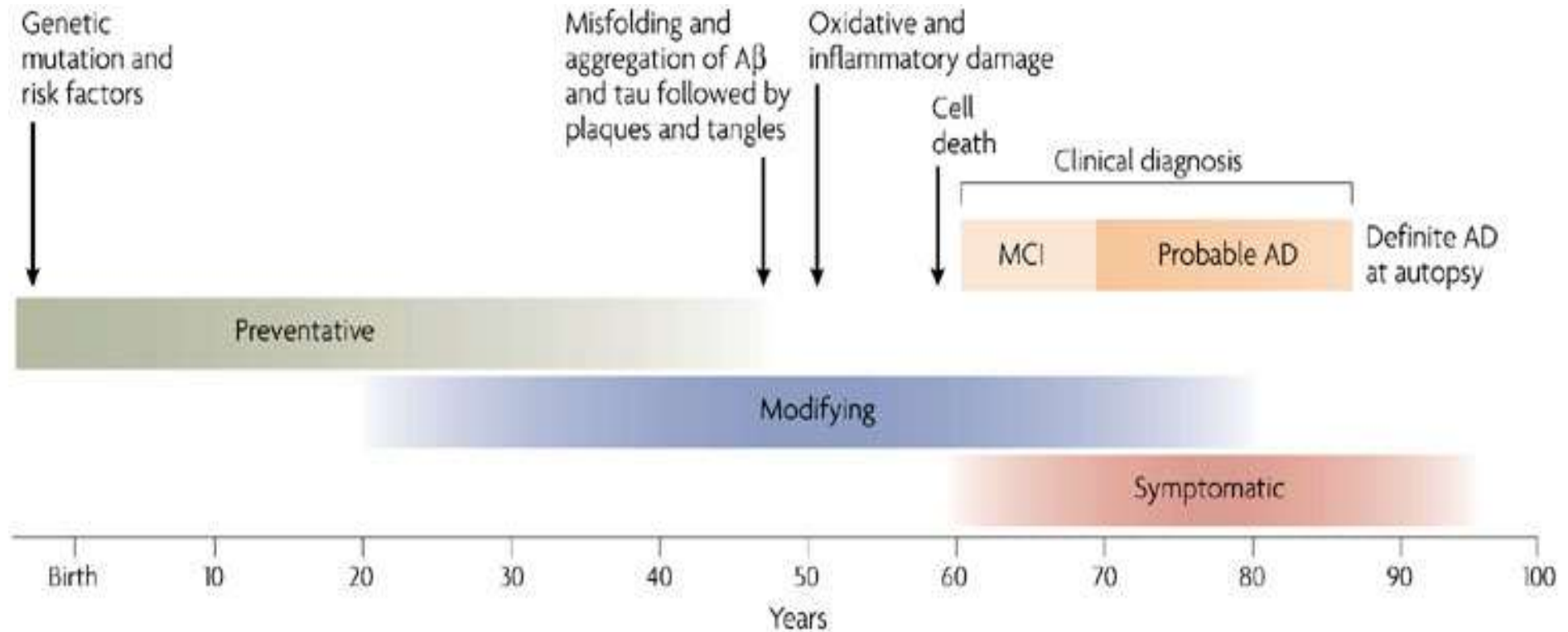
Degenerative Dementias

Disorder	Pathology
Alzheimer's disease	Amyloid/tau pathology
Dementia with Lewy bodies Parkinson's dementia Multisystem atrophy	Alpha-synuclein pathology
Frontotemporal dementia Progressive supranuclear palsy Corticobasilar degeneration	Tau pathology
Huntington's disease Spinocerebellar ataxia	Trinucleotide repeat
Wilson's disease (copper) Hallervorden-Spatz disease (iron)	Toxic/metabolic
Metachromatic leukodystrophy	Leukodystrophy
Creutzfeldt-Jakob disease Variant Creutzfeldt-Jakob disease (bovine spongiform encephalopathy) Gerstmann-Sträussler-Scheinker disease Fatal familial insomnia (thalamic dementia)	Prion-related dementias

Non-Degenerative Dementias

Broad category	Examples
Vascular	MID, Small vessel disease etc
Infectious	HIV, Syphilis, Prog. Multifocal Leucoencephalopathy, TB
Demyelinating	MS
Endocrine	Hypothyroidism, Hypo/Hyperparathyroidism, Cushing's Syn
Brain injury	TBI, HIE, Post-encephalitis
Vitamin deficiency	B12, B1, Folate, Niacin
Vasculitis /vasculitides	SLE, Sjogren's disease
Toxicities	Heavy metal, Alcohol, Pesticides
Organ failures	Hepatic/renal/pulmonary insufficiency
Others	NPH, Porphyria, Pseudodementia

Course of Dementia

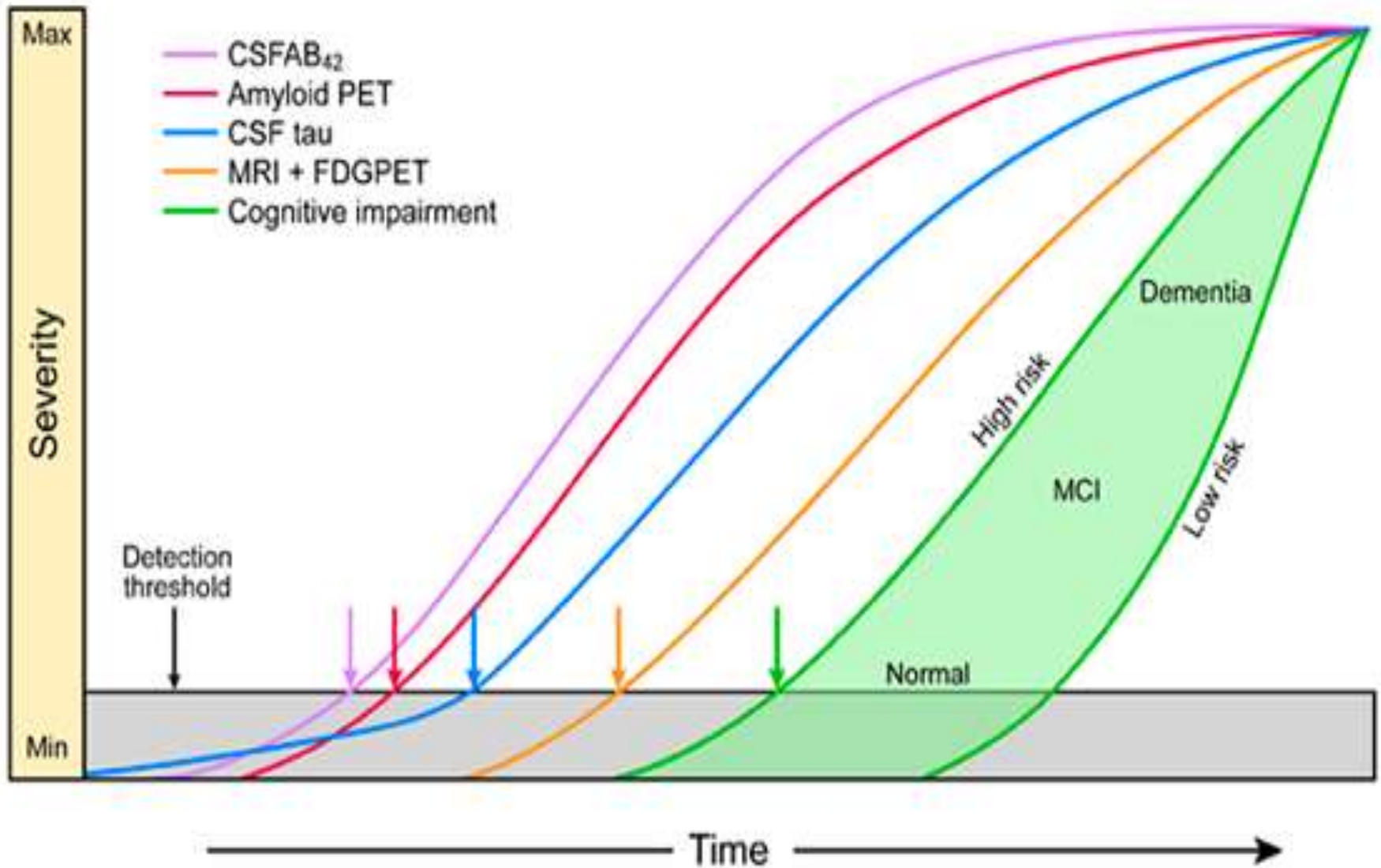


Degenerative Dementias

Biological Markers

Disorder	Pathology
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Biomarkers



Biomarkers

At least one neuronal injury biomarker positive

MCI_{T+}

All biomarkers negative

MCI_{Non+}

β -amyloid 1-42 and one marker of neuronal injury positive

MCI_{A β +T+}

All biomarkers positive

MCI_{All+}

Only β -amyloid 1-42 positive

MCI_{A β +}

Risk for progression to dementia due to AD



Assessment of Cognition in Dementia

- MMSE (Folstein et al. 1975)
- Cognitive Ability Screening Instrument (CASI)
- Dementia rating scale (DRS)
- Animal Naming task
- Clock drawing task

MMSE

- High false positive
- Score of 23 or less: Impairment
- Now--- Age specific norms developed
- Not specific of Alz. Disease
- In AD;
 - Delayed recall, Copying pentagon – IMPAIRED
- Not a sensitive tool for executive and psychomotor changes
- Less useful in FTD, Subcortical dementia

- BPSD

Management of dementia

Activities of daily living




Behavioral control



Cognitive remediation



Drugs – Antidementia drugs



Environmental measures

Pro-cognitive Medications

- ACEIs
- Antiglutamatergic agents
- Others



Thank You

