

DEMENTIA

Date: February 7, 2023

Resources: *Dementia Review*
Dementia PowerPoint

KEY CONCEPTS & LEARNING OBJECTIVES (What you need to demonstrate on an exam in order to pass the test!)

- I. Demonstrate the ability to:
 - a.) Contrast symptoms of dementia versus age-related changes
 - b.) List the demographics of Alzheimer Disease (AD) and the primary risk factors
 - c.) Define Mild Cognitive Impairment (MCI) and its relationship to dementia
 - d.) Contrast the presentation of AD, Dementia with Lewy bodies (DLB) and Frontotemporal dementia (FTD)
 - e.) List the abnormal protein aggregates in AD, DLB and FTD
 - f.) Define the *Amyloid Cascade Hypothesis* and significance of APOE e4 allele
 - g.) Describe the rationale for cholinesterase inhibitors and NMDA receptor antagonists in AD
 - h.) In DLB dementia what medications can address symptoms, and which are contraindicated
 - i.) Define the FTD subtypes: Behavioral, primary progressive aphasia, progressive supranuclear palsy
 - j.) Describe the relevance of the microtubule associated protein tau in FTD and the incidence/age group most frequently affected in FTD
 - k.) Describe the role and contraindications of typical and atypical neuroleptic (antipsychotic) medications in AD
 - l.) List the medical conditions that require caution in the use of anticholinesterase medications in AD
- II. You will begin to apply your anatomical and radiological knowledge to clinical cases or vignettes and:
 - a.) Suggest a site of dysfunction that would explain signs and symptoms for a clinical case presentation
 - b.) Based on a clinical presentation identify the (expected) site of abnormality on an MRI (or CT) scan of the brain
 - c.) Develop 2-3 potential diagnoses, appropriate to the patients' clinical scenario, course and medical history, which would explain the etiology of their difficulty

References – In depth concepts for those who may be interested (not on the exam)

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