

Pocket Reference to Alzheimer's Disease Management

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Author biographies

Anna Burke, MD, is a board certified geriatric psychiatrist and a specialist in dementia care. She has worked extensively with patients and families suffering with Alzheimer's disease (AD) and related dementias. Her area of expertise includes diagnosis and treatment of dementia, as well as treatment of associated behavioral and psychiatric disturbances.

Geraldine R Hall, PhD, ARNP, GCNS, FAAN, is a board-certified clinical nursing specialist who has specialized in care of people affected by dementia since 1980. Her graduate work was completed at the University of Iowa where she taught and became a full professor. Her research and practice is focused on prevention and management of secondary behaviors and helping families to manage. She is widely published and has presented her model, Progressively Lowered Stress Threshold, across the US, Australia, Ireland, and South Korea.

Roy Yaari, MD, MAS, is a board-certified neurologist. He has additional training in a geriatric neurology fellowship and holds a Master's of Advanced Studies in Clinical Research. He has a strong interest in treating dementia patients and in the development of new treatments and therapies.

Adam Fleisher, MD, is a geriatric neurologist, practicing in the Memory Disorders Clinic at the Banner Alzheimer's Institute. He obtained his general neurology training at Johns Hopkins Hospital then completed a clinical and research dementia fellowship at the University of California, San Diego, as well as a Master's degree in Clinical Research. He is an expert in the field of imaging for studying the earliest evidence of AD pathology in the brain, and is well published in the fields of dementia clinical trials and imaging.

Jan Dougherty, RN, MSN, is responsible for setting a new standard of care for patients with dementia and their families through the development and implementation of innovative programs. Jan has extensive experience in dementia care and has developed many pioneering programs being used in Arizona and nationally.

Jeffrey Young, BA, is a clinical psychology doctoral student at the American Professional School of Psychology-Argosy University, Phoenix. He is responsible for neuropsychological testing of patients in the memory disorders clinic. He has a strong interest in early detection and progression of dementia and doing testing research with dementia and cognitively impaired patients.

Helle Brand, PA, has an interest in education and counseling related to dementia, looking at both the effect of dementia on patient's day-to-day functioning and on the extended family. She has experience with dementia as a physician assistant and as a former physical therapist who specialized in the care of older people.

Pierre Tariot, MD, has been Director of the Banner Alzheimer's Institute Memory Disorders Center and Associate Director of the Institute since 2006. A teacher and scholar, he has studied diagnosis and therapy for dementia and Alzheimer's disease, recognition, and management of behavioral disturbances in dementia, and treatment of depression. He has published over 220 papers on these topics, earning awards for his research, such as the American Geriatrics Society New Investigator Award for Neuroscience, an NIMH Geriatric Mental Health Academic Award, and the 2005 UCLA Turken Award. His research affiliations include the NIMH, NIA, Arizona Department of Health, Institute for Mental Health Research, and the Alzheimer's Association.

Abbreviations

Aβ	Amyloid beta
Ach	Acetylcholine
ACHEI	Acetylcholinesterase inhibitors
AD	Alzheimer's disease
ADEAR	Alzheimer's Disease Education and Referral
APP	Amyloid beta precursor protein
ApoE-ϵ4	Apolipoprotein E- ϵ 4
BPSD	Behavioral and psychological symptoms of dementia
CSF	Cerebrospinal fluid
CT	Computed tomography
DNR	Do not resuscitate
DOT	Department of Transportation
DSM-IV-TR	<i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revisions</i>
EFNS	European Federation of the Neurological Societies
FAD	Familial Alzheimer's disease
FDA	US Food and Drug Administration
FDG-PET	Fluorodeoxyglucose-positron emission tomography
MCI	Mild cognitive impairment
MMSE	Mini-Mental Status Exam
MoCA	Montreal Cognitive Assessment
MRI	Magnetic resonance imaging
NIA	National Institute on Aging
NINDS AD	National Institute on Neurological Disorders and Stroke, Alzheimer's Disease
NMDA	<i>N</i> -methyl-D-aspartate
PET	Positron emission tomography
PS-1	Presenilin 1
PS-2	Presenilin 2
RAVLT	Rey Auditory Verbal Learning Test
SPECT	Single photon emission computerized tomography
SPMSQ	Short Portable Mental Status Questionnaire
T-tau	Total tau

Preface

Alzheimer's disease (AD) and related dementias are common conditions and are often diagnosed and treated by primary care providers, yet few have training in state-of-the-art dementia care. Families expect the health care provider to notice when a person loses capacity, diagnose the illness, and manage it both pharmacologically and nonpharmacologically for the remainder of the person's life. It is hoped that this guide will help prepare providers for the complex situations that occur during the diagnoses and management of this terminal disease throughout the disease trajectory to better support the patient, family, and caregivers.

PART ONE

**Diagnosis and management
of Alzheimer's disease**