

Introduction

For patients with dementia, and particularly for those with Alzheimer's disease (AD), every clinical decision made on their behalf requires extensive consideration. The rush to find viable shortcuts, or an absolute tool to use in making the differential diagnosis of AD, or to categorize its severity is prompted by the dire predictions of major increases in the prevalence and incidence of AD in the upcoming 20 to 30 years. This issue of *clinical CORNERSTONE*[®] addresses a substantive and growing area for the primary care physician.

In the first article, Michael S. Mega, MD, PhD, highlights recent breakthroughs in disease-modifying interventions that underscore the urgency to make the differential diagnosis of AD as early as possible. The clinical assessment is still the cornerstone of the diagnostic approach. The accuracy of the clinical diagnosis of AD, compared with pathologic assessment, has increased from more than 80% to more than 90% over the last two decades, due mainly to the application of clinical diagnostic criteria. When the results of the clinical assessment and history suggest the dementia syndrome, laboratory and imaging studies should be ordered to rule out reversible causes of cognitive decline and assist the accurate diagnosis.

Steven T. DeKosky, MD, discusses the research results that help define the pathophysiology of AD as part of the quest to find new approaches and avenues for therapeutic interventions. He delineates the categories of deficiencies in AD and the structural and biochemical changes precipitating clinical manifestations and provides some insight into the newest research—genomics—where specific genetic mutations have been identified as markers for the potential development of AD in later life.

I comment in my article on the growing consensus that AD results from an increase in the production

or accumulation of beta-amyloid protein, leading to nerve cell death, and offer a rationale for managing patients who have AD by using antioxidants, cholinesterase inhibitors, and psychotropic agents. I also emphasize the importance of caring for the caregivers. With depression rates as high as 50%, AD caregivers need as much education and support as possible because they provide almost 100% of the care of AD patients prior to admission for long-term institutional care.

Helena Chui, MD, focuses on the etiology, manifestations, and testing used to make the differential diagnosis of subcortical ischemic vascular disease, the second most common cause of dementia and a disorder that in many cases may be prevented. Current treatment options include pharmacotherapies for the primary ischemia as well as concomitant therapies used to treat comorbid conditions.

Daniel I. Kaufer, MD, notes in his article that the principles of managing patients with chronic, age-associated diseases apply as much to AD as they do to congestive heart failure or osteoarthritis. Although their primary concern is maintaining residual tissue or organ function, primary care physicians also play an important role in supporting patients and their caregivers to help them adjust to disease-related limitations. The many challenges facing patients and their caregivers underscore the need for consensual decision-making within the therapeutic alliance formed with their primary care physician.

Primary care physicians and involved referral specialists will find this issue a valuable resource as they diagnose and provide treatment for increasing numbers of elderly patients with AD or related dementias.

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