

## 29 Dementia

**William W. Seeley, Gil D. Rabinovici, Bruce L. Miller**

Dementia, a syndrome with many causes, affects nearly 6 million people in the United States and results in a total annual health care cost in excess of \$300 billion. Dementia is defined as an acquired deterioration in cognitive abilities that impairs the successful performance of activities of daily living. Episodic memory, the ability to recall events specific in time and place, is the cognitive function most commonly lost; 10% of persons age >70 years and 20–40% of individuals age >85 years have clinically identifiable memory loss. In addition to memory, dementia may erode other mental faculties, including language, visuospatial, praxis, calculation, judgment, and problem-solving abilities. Neuropsychiatric and social deficits also arise in many dementia syndromes, manifesting as depression, apathy, anxiety, hallucinations, delusions, agitation, insomnia, sleep disturbances, compulsions, or disinhibition. The clinical course may be slowly progressive, as in Alzheimer's disease (AD); static, as in anoxic encephalopathy; or may fluctuate from day to day or minute to minute, as in dementia with Lewy bodies (DLB). Most patients with AD, the most prevalent form of dementia, begin with episodic memory impairment, but in other dementias, such as frontotemporal dementia (FTD), memory loss is not typically a presenting feature.

**Focal cerebral disorders are discussed in Chap. 30 and illustrated in a video library in Chap. V2; detailed discussions of AD can be found in Chap. 431; FTD and related disorders in Chap. 432; vascular dementia in Chap. 433; DLB in Chap. 434; Huntington's disease (HD) in Chap. 436; and prion diseases in Chap. 438.**

### FUNCTIONAL ANATOMY OF THE DEMENTIAS

Dementia syndromes result from the disruption of specific large-scale neuronal networks; the location and severity of synaptic and