Dementia is one of the most important yet difficult conditions that physicians are asked to manage. It takes an enormous toll on patients, eventually robbing them of the accumulated wealth of their life experiences, destroying the very essence of their beings. Families likewise suffer from the loss of patriarchs and matriarchs while communities lose the guidance and wisdom of seasoned leaders. With 6% to 10% of those over 65 years of age affected, dementia takes a staggering economic toll that will only worsen as the population ages. Though dementia is common, and despite the severity of its impact, physicians and families often overlook the diagnosis. Recognizing dementia is not the only challenge because identifying the correct diagnosis may be difficult. Finally, the management of these patients can be daunting even for skilled geriatricians.

This issue of Medical Clinics of North America is devoted to dementia. It is divided into three sections discussing clinical aspects, recent scientific insights, and treatments. The first article provides an overview of the diagnosis of patients with dementia. The clinical history, examination, laboratory evaluation, and differential diagnosis are reviewed. The next five articles review specific dementing diseases that are of particular importance today. Vascular dementia is reviewed in the second article. This represents the second most common cause of dementia, after Alzheimer’s disease. The third and fourth articles review frontotemporal dementia and dementia with Lewy bodies. These two conditions have recently been distinguished from other types of dementia. New criteria have been proposed, allowing
them to be distinguished from other dementing illnesses. Correctly diagnosing frontotemporal dementia and dementia with Lewy bodies can explain otherwise baffling behaviors and can provide important prognostic information to patients and families. These diagnoses also carry important implications for treatment. The fifth article is devoted to AIDS dementia. Dementia in patients with HIV infections can be the result of a number of different causes. Correctly identifying the cause is key to providing optimal treatment. The sixth article rounds out the discussion of specific diseases with a review of human prion diseases. Prion diseases represent a new class of infectious agents that have had dramatic effects on public health policy because of their link to specific food sources. Understanding and recognizing the conditions described in these opening articles should provide the practitioner with valuable tools in evaluating dementia patients.

The next section of this issue reviews some of the scientific findings that have advanced our understanding of dementing diseases. The epidemiology of dementia is discussed in the seventh article. Epidemiology studies drive many of the public health care decisions that must be made in caring for the elderly because the incidence and prevalence of dementia point toward society’s present and upcoming healthcare needs. Epidemiology also identifies risk factors for dementia that may provide additional insight into the pathogenesis of dementing diseases. The eighth article describes the many advances in the genetics of dementia that have occurred during the past few years. Many families with genetic risks of dementia have now been recognized. In many cases, the responsible genes have been identified. These genes and the proteins that they encode increase our understanding of dementia at the molecular level, not only for familial dementias, but also for nongenetic dementias. Genetic advances merge into the recent advances in our understanding of the molecular basis of Alzheimer’s disease. We are beginning to understand the molecular causes of two of the prominent pathologic changes found in Alzheimer’s disease: neurofibrillary tangles and plaques. The role of tau in the formation of neurofibrillary tangles and Alzheimer’s disease is described in the ninth article. The role of beta-amyloid in the formation of plaques and Alzheimer’s disease is described in the tenth article.

The final two articles address the treatment of patients with dementia. The eleventh article describes some of the nonpharmacologic treatments that may be used to manage the symptoms of dementia. Successful management of these symptoms can greatly reduce the burden on patients and families. In addition, these treatments can avert or delay the need for expensive care in assisted living facilities or nursing homes. The final article describes pharmacologic treatments of dementia. These relatively new medications are the first treatments that can improve cognitive function.

I hope this issue will provide the practitioner with the tools needed to diagnose and manage patients with dementia in their clinical practices. It should also provide a basis for understanding the recent scientific advances
that have added so much excitement to this field, and that provide such hope for the future.

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