CONTENTS

Preface xv
Julie K. Gammack and John E. Morley

Cognitive Impairment 769
Seema Joshi and John E. Morley

Cognitive impairment becomes increasingly more common with aging. The presence of delirium and dementia are missed often in older persons. There is increasing uncertainty about the role of acetylcholine esterase inhibitors in the management of dementia. It is important to treat the reversible causes of delirium and dementia.

Mood Disorders in the Elderly 789
Mehret Gebretsadik, Sundeep Jayaprabhu, and George T. Grossberg

Mood disorders in the elderly are common, underdiagnosed, and inadequately treated. Older adults suffer from a spectrum of depressive disorders that are commonly comorbid with other psychiatric or medical illnesses. Elderly people who have bipolar disorder pose a growing challenge relative to diagnosis and treatment. The approach to the treatment of these disorders is multifaceted and needs to be individualized with patients and caregivers. The three main modalities of treatment (pharmacotherapy, psychotherapy, and neuromodulation) are increasingly safe and effective for treating mood disorders in older adults.

Falls and Their Prevention in Elderly People: What Does the Evidence Show? 807
Laurence Z. Rubenstein and Karen R. Josephson

Falls are a common and complex geriatric syndrome that cause considerable mortality, morbidity, reduced functioning, and premature nursing home admissions. Falls have multiple precipitating causes and predisposing risk factors, which make their diagnosis, treatment, and particularly, prevention, a difficult clinical challenge. Nonetheless, much can be done to reduce the risk for falls
and to improve the quality of life for fall-prone individuals. This article provides an overview of the epidemiology of falls, their major causes and risk factors, the types of available fall-prevention interventions, and the evidence on the efficacy of these interventions.

**Urinary Incontinence: Selected Current Concepts**  
Margaret-Mary G. Wilson

Urinary incontinence (UI) is highly prevalent in older adults and associated with excess comorbidity and increased mortality. Intensive screening and comprehensive clinical examination of all elders enables prompt detection, accurate classification, and appropriate treatment. Overactive bladder (OAB) is the most common cause of persistent incontinence in the older adult. As with other types of UI, behavior modification is first-line treatment of OAB. Although antimuscarinic agents have been shown to be highly effective in the treatment of OAB, limited data are available regarding the safety and tolerability of these agents in older adults. Patients who fail to respond to noninvasive treatment or those in whom surgery may be appropriate should be referred to the urologist for evaluation and further management.

**Frailty**  
John E. Morley, Matthew T. Haren, Yves Rolland, and Moon Jong Kim

Frailty is a condition that now can be objectively defined by the Fried criteria. Frail people are at risk for rapid deterioration when exposed to stressful events. The causes of frailty are multifactorial and include sarcopenia, protein energy malnutrition, pain, and various disease processes, such as anemia, diabetes mellitus, depression, and congestive heart failure. At the pathophysiologic level, elevated proinflammatory cytokine, low vitamin D, and low testosterone levels (in men and possibly women) all play a role in the genesis of frailty.

**Heart Disease and Aging**  
Wilbert S. Aronow

Coronary artery disease is the most common cause of death in older persons. Hypertension is present in nearly one third of older women and men. The prevalence of valvular aortic stenosis, aortic regurgitation, mitral regurgitation, and of mitral annular calcification increases with age in older men and in older women. Congestive heart failure (CHF) is the most common cause of hospitalization in persons aged 65 years and older. The prevalence and incidence of CHF increase with age; an increasing proportion of cases has normal left ventricular ejection fraction. The prevalence of chronic atrial fibrillation increases with age and is an independent predictor of new coronary events and thromboembolic stroke in older persons.
Heart Failure in Older Adults
Michael W. Rich

Heart failure affects approximately 5 million Americans, half of whom are at least 75 years of age, and is the leading cause of hospital admission among older adults. Additionally, the prevalence of heart failure is increasing, largely owing to the aging of the population. Heart failure in older adults differs in many respects from heart failure that occurs during middle age, including an increased proportion of women, increasing prevalence of heart failure with preserved left ventricular systolic function, and a marked increase in the number of coexisting medical conditions. In light of these factors, this article reviews the epidemiology, pathophysiology, clinical features, and treatment of heart failure in older adults.

Nutritional Disorders in the Elderly
Ian McPhee Chapman

Undernutrition is common in older people and has serious adverse effects. Weight loss and low body weight are key markers. Correctable causes, such as depression, are common and should be sought. Structured efforts to encourage food intake, together with nutritional supplements often are of benefit. It is hoped that a better understanding of the underlying mechanisms will lead to targeted treatments. Overweight and obesity also are common in older people, and are associated with morbidity and impaired function. It probably is appropriate to recommend weight loss to obese older people who have associated comorbidities, particularly reduced mobility, but seldom, if ever, for increased weight alone.

Diabetes in the Elderly
Graydon S. Meneilly

We are approaching an epidemic of diabetes in the elderly. Diabetes and its complications have a significant impact on quality of life in this age group. Recent studies suggest that diabetes can be prevented in a large number of patients with appropriate interventions. It seems that diabetes in this age group is metabolically distinct. As a result, the approach to therapy in the elderly differs from that in younger patients. Unfortunately, we still have huge gaps in our understanding of the pathogenesis and treatment of diabetes in the aged, and further studies are needed urgently.

Assessment and Management of Chronic Pressure Ulcers in the Elderly
Aimée Dinorah Garcia and David R. Thomas

The aging population is increasing the number of individuals at risk for pressure ulcer formation. Risk factors, such as immobility, poor nutrition, comorbidities, and aging skin, make the elderly more susceptible to pressure ulcer formation. The key to management is prevention, but once pressure ulcers occur, it is important to understand the principles of wound healing including debridement,
bacterial management, moist wound healing, pressure relief, and nutritional support.

**Elders with Epilepsy**

Nancy S. Collins, Rita A. Shapiro, and R. Eugene Ramsay

Seizures and epilepsy are increasingly common in the growing numbers of elders worldwide. Provoked seizures need to be distinguished from epilepsy, as evaluation and management differ. Seizures in older adults are frequently under-recognized and have presentations that may be mistaken for other causes of altered mental status, such as dementia, transient ischemic attack, syncope, or stroke. Considering the medications taken for common comorbidities in elders, the pharmacokinetic profile of the newer antiepileptic medications (AEDs) has distinct advantages. After appropriate recognition, evaluation, and treatment, the prognosis of epilepsy in elders is good, with improved seizure control along with maintenance of functional status and quality of life.

**The Older Cancer Patient**

Heidi K. White and Harvey J. Cohen

Providing effective and tolerable cancer treatment for the growing number of older adult patients who have cancer requires an understanding of the role of aging, comorbidity, functional status, and frailty on treatment outcomes. The incorporation of comprehensive geriatric assessment (CGA) into the care of older patients who have cancer ensures that the cognitive, physical, and psychosocial strengths and limitations of individual patients are considered in the development of treatment plans. CGA also may improve outcomes by identifying and optimally treating comorbid conditions and functional impairments. Optimal treatment of the older adult patient who has cancer starts with careful delineation of goals through conversation. The treatment plan should be comprehensive and address cancer-specific treatment, symptom-specific treatment, supportive treatment modalities, and end-of-life care.

**Palliative Care and Pain Management**

Laura J. Morrison and R. Sean Morrison

Palliative care has largely evolved to address the significant suffering and deficiencies in care documented among persons living with advanced chronic illness, both those approaching the end of life and those earlier in their course. Clinicians caring for older adults need to recognize the critical role of geriatric palliative care in serving this population and develop expertise. This article examines five key domains of palliative care: communication, symptom management, coordination of care, psychosocial and spiritual realms, and grief and bereavement support. Specific attention is given to pain management and the approach to treating dyspnea, constipation, and nausea and vomiting, all common symptoms experienced by elders with potentially life-limiting illness. A
patient case is discussed to illustrate the integral role palliative care often plays as a part of appropriate, routine medical care.

Andropause: A Quality-of-Life Issue in Older Males 1005
Matthew T. Haren, Moon Jong Kim, Syed H. Tariq, Gary A. Wittert, and John E. Morley

Late-onset hypogonadism, also known as andropause, is common in older men. To make the diagnosis there is often a need to measure free or bioavailable testosterone. Testosterone replacement can lead to improved sexuality, increased muscle mass and strength, decreased fat mass, enhanced bone mineral density, better cognition, and improved function.

Aging and Sexuality 1025
Terrie B. Ginsberg

Sexuality in the elderly has unique ramifications. With the aging process come changes and challenges faced by our senior citizens. Health issues, sexual myths, discrimination, indifference, and intolerance are all obstacles facing this group. Proactive measures taken by health care providers, including educating our society and educating our seniors, create a more comfortable and enjoyable environment for our seniors.

Index 1037