

CONTENTS

<b>Preface</b>	xi
Syed H. Tariq	

<b>Chronic Gastrointestinal Symptoms in the Elderly</b>	721
Sarah J. Crane and Nicholas J. Talley	

Typical and atypical symptoms from acid reflux, dyspepsia, chronic constipation, fecal incontinence, and irritable bowel syndrome are extremely common in adults and remain so in the geriatric population. The presence of these problems may have profound effects on the functional status, independence, and quality of life in the vulnerable older population, making it essential for physicians to inquire actively about them and to be able to recognize atypical presentations when appropriate. This article summarizes the definitions, epidemiology, clinical presentation, and impact of these common problems in the geriatric patient.

<b>The Anorexia of Aging</b>	735
Ian McPhee Chapman	

Undernutrition is common in the elderly, particularly those in nursing homes and other institutions. It is associated with substantial adverse effects. The age-associated physiologic reduction in appetite and food intake, which has been termed "the anorexia of aging," contributes to the development of pathologic anorexia and undernutrition. This article reviews age-related changes to appetite, food intake, and body composition; undernutrition in the elderly; and the factors contributing to physiologic and pathologic anorexia and undernutrition.

<b>The Aging Gut: Physiology</b>	757
John E. Morley	

Changes in the physiology of the gastrointestinal tract with aging are less obvious than are seen in other organs, such as the brain.

Nevertheless, physiologic changes play a role in the anorexia of aging, postprandial hypotension, aspiration pneumonia, increased *Clostridium difficile* infections, fecal incontinence, gallstones, and altered drug metabolism.

### **Gastrointestinal Bleeding in Older Adults**

769

Syed H. Tariq and George Mekhjian

Gastrointestinal bleeding in older adults is a frequent cause of hospital admissions. The presence of multiple comorbidity conditions and greater medication use in this age group influence the clinical outcome. The selection of diagnostic and therapeutic maneuvers often depends more on local expertise and availability. This article addresses clinical presentation, etiology, diagnosis, and treatment of upper and lower gastrointestinal bleeding in elderly individuals.

### **Gastric Emptying, Diabetes, and Aging**

785

Paul Kuo, Christopher K. Rayner, and Michael Horowitz

Gastric emptying is mildly slowed in healthy aging, although generally remains within the normal range for young people. The significance of this is unclear, but may potentially influence the absorption of certain drugs, especially when a rapid effect is desired. Type 2 diabetes is common in the elderly, but there is little data regarding its natural history, prognosis, and management. This article focuses on the interactions between gastric emptying and diabetes, how each is influenced by the process of aging, and the implications for patient management.

### **Inflammatory Bowel Diseases in the Elderly**

809

Prabhakar P. Swaroop

Inflammatory bowel disease (IBD) in elderly individuals is associated with a unique set of challenges, some of which are related to age. This article examines the diagnosis and management of IBD in the context of recent advances in the understanding of its pathogenesis, and newer therapeutic modalities that have been possible from these advances.

### **Constipation and Irritable Bowel Syndrome in the Elderly**

823

John E. Morley

Constipation and irritable bowel syndrome are very common in older persons. Constipation is over diagnosed and over treated in older persons. Lifestyle changes, osmotic laxatives, and lubiprostone are the approaches of choice for the management of

constipation. Irritable bowel syndrome should be considered in the differential diagnosis of abdominal pain, diarrhea and constipation in older persons.

### **Diarrheal Diseases in the Elderly**

833

Chantri Trinh and Kavita Prabhakar

Diarrhea in the elderly population is one disease that needs special attention in treatment and management, especially in acute- and long-term care residents, because of their multiple comorbidities, immunosenescence, frailty, and poor nutritional status. Close follow-up to ensure adequate hydration and electrolyte replacement and infection control measures to contain outbreaks should be emphasized to caregivers and nursing staff in acute- and long-term care facilities. Although *C difficile* colitis causes significant morbidity and mortality in this population, judicious use of antibiotics is important to decrease the incidence and recurrence of the disease. When the diarrhea is chronic and all stool testings and serologies have been performed, the patient may benefit from endoscopy and colonoscopy for biopsy. Attentive and vigilant nursing staff is crucial in the timely diagnosis and treatment of diarrheal diseases to improve quality of life and reduce mortality.

### **Fecal Incontinence in Older Adults**

857

Syed H. Tariq

Fecal incontinence is an underreported and underappreciated problem in older adults. Although fecal incontinence is more common in women than in men, this difference narrows with aging. Risk factors that lead to the development of fecal incontinence include dementia, physical disability, and fecal impaction. Treatment options include medical or conservative therapy for older adults who have mild incontinence, and surgical options can be explored in selected older adults if surgical expertise is available.

### **Mesenteric Ischemia in the Elderly**

871

Nuri Ozden and Burak Gurses

Intestinal ischemia is a relatively common disorder in the elderly and, if not treated promptly, still carries a high morbidity and mortality rate. High degree of clinical suspicion is of paramount importance in diagnosis, because there is no specific laboratory test available and physical examination findings may be subtle. Once the diagnosis is made, management relies on early resuscitation,

identification, and treatment of the predisposing conditions, along with careful planning of the therapeutic invasive interventions, which altogether may help reduce the mortality and morbidity associated with this condition.

### **Aging Liver and Hepatitis**

889

Omer Junaidi and Adrian M. Di Bisceglie

Chronic liver disease and cirrhosis are the tenth leading causes of death in the United States and results in approximately 25,000 deaths annually. As life expectancy in developed countries has increased, so has the number of elderly patients who have liver disease. With an aging population and chronic liver disease becoming an increasingly significant cause of morbidity and mortality, the various causes for hepatitis will need to be evaluated and available treatments considered, even in elderly population. Common causes for hepatitis in elderly individuals include viral, autoimmune, and drug-induced hepatitis, but evidence for treatment of this population is limited. This article reviews the likely causes of hepatitis in elderly individuals and discusses evidence for treating this population.

### **Alcoholic Liver Disease in the Elderly**

905

Helmut K. Seitz and Felix Stickel

Although per capita alcohol consumption, and thus the prevalence of alcoholic liver disease, decreases generally with age in Europe and in the United States, recently an increase in alcohol consumption has been reported in individuals over 65 years. Reasons explaining this observation may include an increase in life expectancy or a loss of life partners and, thus, loneliness and depression. Although ethanol metabolism and ethanol distribution change with age, and an elderly person's liver is more susceptible to the toxic effect of ethanol, the spectrum of alcoholic liver diseases and their symptoms and signs is similar to that seen in patients of all ages. However, prognosis of alcoholic liver disease in the elderly is poor. In addition, chronic alcohol consumption may enhance drug associated liver disease and may also act as a cofactor in other liver diseases, such as viral hepatitis and nonalcoholic fatty liver disease.

### **Index**

923