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现代胃肠疾病诊断与治疗

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Diagnosis & Treatment in GASTROENTEROLOGY

Scott L. Friedman Kenneth R. McQuaid James H. Grendell

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second edition

a LANGE medical book

CURRENT **Diagnosis & Treatment** in Gastroenterology second edition

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Preface

The second edition of Current Diagnosis and Treatment in Gastroenterology is a single-source reference for practitioners in both hospital and ambulatory settings, responding to a need for an up-to-date and accessible text covering all aspects of gastrointestinal and liver diseases with emphasis on practical features of diagnosis and patient management.

OUTSTANDING FEATURES

- Incorporation of up-to-date, cost-effective diagnostic approaches and therapeutic strategies.
- Comprehensive coverage of all major clinical aspects of gastrointestinal, hepatic, biliary, and pancreatic diseases.
- Authors are all experts who are currently directly involved in patient care and clinical teaching.
- Concise, readable format affording efficient use in various practice settings.
- Inexpensively priced.

INTENDED AUDIENCE

- Medical students and house officers will find the concise, clinically-oriented descriptions of diseases and their management, useful on a daily basis for both the care of patients and preparation for rounds and clinical conferences.
- Surgeons, family physicians, and internists who are not gastroenterologists will find this book helpful as an easyto-use, ready reference and review.
- Nurses, nurse practitioners, physician's assistants, and other health care providers will appreciate the concise approach to clinical problems, combined with clear descriptions of the principles underlying the diagnosis and treatment of digestive diseases.

ORGANIZATION

The first chapter of Current Diagnosis and Treatment in Gastroenterology presents information on the general approach to the patient with symptoms and signs of gastrointestinal disease. Chapters 2–11 are symptom-oriented or relate to disease processes involving more than one organ such as gastrointestinal bleeding, acute diarrhea, functional disorders, and AIDS, as well as gastrointestinal problems related to pregnancy. Chapter 12 covers the evaluation and treatment of nutritional disorders. The rapidly evolving use of minimally invasive surgery for gastrointestinal diseases is summarized in Chapter 13. Chapter 14 describes the use of imaging studies for both gastrointestinal and liver diseases, and Chapter 15 covers the endoscopic management of biliary and pancreatic disease. Chapters 16–32 are organized by organ, providing information on diseases of the esophagus (Chapters 16–19), stomach and small intestine (Chapters 20–25), colon and rectum (Chapters 26–29), and pancreas (Chapters 30–32).

The final twenty-one chapters (33–54) consider diseases of the liver and bile ducts, beginning with a chapter on the approach to the patient with suspected liver disease. The subsequent chapters provide information on diseases of the liver and bile ducts both on the basis of etiology (eg, viral hepatitis, alcoholic liver disease) and on their impact on specific groups of patients (liver disease in children, during pregnancy, and following bone marrow transplantation). Individual chapters are also directed at liver failure, the liver in systemic disease, and liver transplantation.

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Scott L. Friedman, MD Kenneth R. McQuaid, MD James H. Grendell, MD September 2002

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SECTION I

General Approach to Gastrointestinal Diseases

Approach to the Patient with Gastrointestinal Disorders

1

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The primary functions of the gastrointestinal tract are the efficient processing of ingested nutrients and fluids and the elimination of undigested waste. The disruption of this process leads to a number of complaints. The cardinal symptoms that suggest gastrointestinal pathology are heartburn, dyspepsia, problems of swallowing (odynophagia and dysphagia), chest pain, hiccups, nausea and vomiting, gas, diarrhea, constipation, abdominal pain, weight loss, and occult or overt gastrointestinal bleeding. These symptoms may be attributable to problems intrinsic to the gastrointestinal tract or may be a manifestation of a systemic disorder. The complaints may represent minor problems that are easily corrected by a change in diet or lifestyle, or may be indicative of serious pathology. In this chapter, the approach to each of these symptoms will be addressed. For a discussion of the specific disease processes giving rise to these symptoms, the reader will be referred to the pertinent chapters.

SYMPTOMS OF ESOPHAGEAL DISEASE

The clinical history is extremely important in the diagnosis of esophageal disease. Complaints of heartburn, dysphagia, and odynophagia are highly specific and virtually always indicate an esophageal cause of symptoms. Less specific complaints that may be sometimes attributable to esophageal dysfunction include chest pain, belching, and hiccups. The approach to dysphagia and hiccups is discussed in subsequent sections.

Heartburn

Heartburn (pyrosis) is an extremely common symptom, occurring in 7% of Americans on a daily basis and in approximately one-third on a monthly basis. Pregnant women are commonly affected. Heartburn is usually defined as a feeling of substernal burning that radiates toward the neck from the epigastrium. Patients may use a number of other terms including "indigestion" and "acid regurgitation." Because heartburn is caused by the regurgitation of gastric acidic contents into the esophagus, it is generally improved, albeit transiently, by antacids. Heartburn occurs most commonly within 1 hour of meals or within 2 hours of reclining, especially if the patient has eaten a late meal or snack. Heartburn may be precipitated by foods that either decrease the lower esophageal sphincter pressure or cause direct mucosal irritation of the esophagus. It may also be precipitated by maneuvers that increase intraabdominal pressure (eg, lifting, bending, straining at stool, and exercise). Cigarettes potentiate heartburn by lowering the lower esophageal sphincter pressure and through relaxation of the sphincter during air swallowing. The clinical diagnosis of gastroesophageal reflux disease (GERD) based on the presence of a symptom of heartburn has a relatively high sensitivity of approximately 80% but a specificity of only 60%. In contrast, when heartburn clearly dominates the patient's complaints, the specificity increases to 90% with a positive predictive value for GERD of 80%. In other words, patients with a dominant complaint of heartburn are likely to

have GERD. However, in patients who complain of a number of symptoms including heartburn and other associated dyspeptic symptoms (eg, pain, bloating, nausea), the diagnosis of GERD is less certain.

Regurgitation

Regurgitation describes the sudden, spontaneous reflux of small volumes of bitter tasting acidic material into the mouth. It most commonly occurs after meals, especially when bending over or at night. It is present in approximately two-thirds of patients with GERD but also occurs intermittently in up to one-half of healthy adults. It is distinguished from vomiting by the absence of nausea or retching. "Water brash" occurs when the mouth fills with clear, salty fluid. Water brash is not regurgitated fluid; rather, it occurs through salivary secretion stimulated through a vagally mediated reflex arc in response to acidic contents in the esophagus.

Regurgitation should be differentiated from rumination, which is the regurgitation of recently ingested food into the mouth with subsequent remastication and reswallowing or spitting out. Nausea and vomiting are absent. Rumination usually occurs in the immediate postprandial period. It occurs more commonly in males and in patients with severe psychiatric problems or the severely retarded. GERD and bulimia are often confused with rumination.

Odynophagia

Odynophagia is pain with swallowing. The discomfort may be a dull retrosternal pain or a severe, sharp sensation. Odynophagia usually reflects severe erosive disease. It is most commonly associated with infectious esophagitis resulting from *Candida*, herpes, and cytomegalovirus, especially in immunocompromised patients [eg, acquired immunodeficiency syndrome (AIDS), patients undergoing chemotherapy]. Dysphagia may also be present with these conditions. Odynophagia may also be caused by pill-induced ulcers (Table 1–1). Rarely, it may be caused by severe erosive esophagitis resulting from GERD or esophageal carcinoma.

Chest Pain

Recurrent chest pain resembling angina pectoris can originate from disorders of the esophagus. Cardiac disease (eg, coronary ischemia, coronary spasm, mitral valve prolapse, and microvascular angina) must first be definitively excluded in patients with typical or atypical angina. Approximately one-third of patients with chest pain who undergo cardiac catheterization have normal

Table 1-1. Causes of odynophagia.

Pill esophagitis

Antibiotics

Doxycycline

Tetracycline

Clindamycin

Antivirals

Zidovudine

Zalcitabine

Nonsteroidal antiinflammatory drugs Others

Potassium chloride pills

Quinidine

Ferrous sulfate

Ascorbic acid

Phenytoin

Theophylline

Infectious esophagitis

Candida albicans

Herpes simplex

Cytomegalovirus

Corrosive esophagitis

Severe reflux esophagitis Nonspecific ulcerations

Primarily in AIDS

epicardial arteries and, therefore, are presumed to have a noncardiac source of pain. Causes of noncardiac chest pain include chest wall or thoracic spine pain, psychiatric problems (eg, depression and panic disorder), and esophageal dysfunction. Esophageal causes of chest pain include acid reflux (in up to 50% of patients), esophageal motility disorders, abnormal visceral nociception, and esophageal distention (see Chapter 17).

The clinical history is unreliable in distinguishing cardiac from esophageal causes of chest pain. Esophageal chest pain results in intermittent anterior chest discomfort. Esophageal chest pain may mimic coronary ischemia with substernal squeezing discomfort or may present as a burning sensation that radiates to the neck, jaw, or arm. Esophageal chest pain can be precipitated by exercise or emotional stress and is sometimes relieved by nitroglycerin. More commonly, however, esophageal chest pain presents with features that are not characteristic of cardiac ischemia, including pain that occurs during sleep, lasts for hours to days, or is precipitated by hot or cold liquids or meals. Symptoms may last from minutes to hours. The majority of patients with esophageal chest pain report other symptoms compatible with esophageal disease, such as heartburn, regurgitation, or dysphagia. However, chest pain is the only symptom in approximately 10% of patients. Also,