



# DEVELOPMENTS IN DIGESTIVE DISEASES

*Edited by*

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*To my colleagues—past and present*

## PREFACE

This volume, as were its two predecessors, is concerned with certain aspects of the everchanging scene in the field of digestive diseases. The topics selected for consideration are not the only ones in which there has been enlargement and extension of existing knowledge. They do represent areas in which there have been newer developments, however, and they are subjects that have the added appeal of being timely, interesting, and clinically relevant.

Those whose daily activities are for the most part confined to disorders of the digestive system possibly may find little in these pages with which they are not already familiar to greater or lesser degree. For those whose activities encompass a broader sphere, however, such as general internists and family physicians, the contents of this volume should provide in-

formed insight into some advances in digestive diseases that have bearing on their clinical practices.

All of the contributors occupy positions of authority in the subject matter they address. The resumés they have fashioned of the current status and the more recent advances in their areas of special interest are lively and informative. To each of them I express my appreciation and admiration.

To Mr. R. Kenneth Bussy and Ms. Mary Mansor of Lea & Febiger go my thanks for encouragement, advice and superb editorial help. I am deeply grateful as well to Mrs. Denise Frankie for her heroic secretarial contributions, to my colleagues for their cooperation, and to my wife and friends for their tolerance.

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# CONTENTS

|            |                                                       |    |
|------------|-------------------------------------------------------|----|
| CHAPTER 1. | Endoscopic Control of Gastrointestinal Bleeding ..... | 1  |
|            | Dennis M. Jensen                                      |    |
|            | Medical Device Amendment .....                        | 3  |
|            | Methods .....                                         | 3  |
|            | Endoscopes and Accessories—Clinical Relevance .....   | 3  |
|            | Animal Ulcer Models .....                             | 5  |
|            | Safety .....                                          | 7  |
|            | Advantages and Disadvantages of Ulcer Models .....    | 8  |
|            | Single Vessel Gastric Ulcer Model .....               | 9  |
|            | Animal Models of Esophageal Varices .....             | 9  |
|            | Laser Photocoagulation .....                          | 10 |
|            | Current Laser Instruments .....                       | 11 |
|            | Argon Laser Photocoagulation .....                    | 11 |
|            | Animal Studies .....                                  | 11 |
|            | Human Studies .....                                   | 12 |
|            | YAG Laser Photocoagulation .....                      | 13 |
|            | Animal Studies .....                                  | 13 |
|            | Human Studies .....                                   | 14 |
|            | Electrocoagulation and Fulguration .....              | 15 |
|            | Monopolar Electrocoagulation (MPEC) .....             | 17 |
|            | Instrumentation .....                                 | 17 |
|            | Animal Studies .....                                  | 17 |
|            | Human Studies .....                                   | 18 |
|            | Bipolar Electrocoagulation (BPEC) .....               | 19 |
|            | Instrumentation .....                                 | 19 |
|            | Animal Studies .....                                  | 20 |
|            | Human Studies .....                                   | 20 |
|            | Electrofulguration .....                              | 20 |
|            | Heater Probe .....                                    | 20 |
|            | Topical Methods .....                                 | 21 |

|            |                                                                            |    |
|------------|----------------------------------------------------------------------------|----|
|            | Tissue Glues .....                                                         | 21 |
|            | Clotting Factors .....                                                     | 21 |
|            | Iron Powder—Electromagnet .....                                            | 22 |
|            | Clinical Relevance .....                                                   | 22 |
|            | Endoscopic Injection Methods .....                                         | 22 |
|            | Ulcer Bleeding .....                                                       | 22 |
|            | Variceal Bleeding .....                                                    | 23 |
|            | Clinical Relevance .....                                                   | 24 |
| CHAPTER 2. | Proximal Gastric Vagotomy .....                                            | 29 |
|            | George A. Hallenbeck and<br>Leo A. Gordon                                  |    |
|            | Kinds of Vagotomy .....                                                    | 29 |
|            | Truncal (Total Abdominal) Vagotomy .....                                   | 29 |
|            | Selective Gastric (Total Gastric) Vagotomy .....                           | 30 |
|            | Proximal Gastric Vagotomy (PGV) .....                                      | 30 |
|            | Rationale of Proximal Gastric Vagotomy .....                               | 30 |
|            | Gastric Function after PGV .....                                           | 30 |
|            | Gastric Secretion .....                                                    | 30 |
|            | Serum Gastrin .....                                                        | 32 |
|            | Gastric Motility and Gastric Emptying .....                                | 32 |
|            | Duodeno-Gastric Reflux After PGV .....                                     | 33 |
|            | PGV for Duodenal Ulcer .....                                               | 33 |
|            | Operative Mortality Rates .....                                            | 33 |
|            | Gastrointestinal Symptoms after Operations .....                           | 35 |
|            | Overall Grading of Results .....                                           | 37 |
|            | Recurrent Ulceration after PGV .....                                       | 37 |
|            | Trials of PGV for Complicated Problems of Duodenal Ulcer ..                | 39 |
|            | PGV and Bleeding Peptic Ulcers .....                                       | 39 |
|            | PGV and Acutely Perforated Duodenal Ulcers .....                           | 40 |
|            | PGV and Obstructing Duodenal Ulcers .....                                  | 40 |
|            | PGV for Gastric Ulcer .....                                                | 40 |
|            | Metabolic Sequelae of Gastric Operations .....                             | 41 |
|            | Clinical Relevance .....                                                   | 42 |
| CHAPTER 3. | Breath Tests: Concept and Role in Digestive Disorders .....                | 47 |
|            | Phillip P. Toskes                                                          |    |
|            | Principle and Methodology of Breath Analysis Tests .....                   | 47 |
|            | <sup>14</sup> C Breath Tests .....                                         | 47 |
|            | Stable Isotope ( <sup>13</sup> C) Breath Tests .....                       | 48 |
|            | Hydrogen (H <sub>2</sub> ) Breath Tests .....                              | 49 |
|            | <sup>14</sup> CO <sub>2</sub> Plastic Scintillation Detection System ..... | 49 |
|            | Clinical Applications .....                                                | 51 |
|            | Small Intestine Bacterial Overgrowth .....                                 | 51 |
|            | Bile Acid Breath Test .....                                                | 51 |

|            |                                                                           |    |
|------------|---------------------------------------------------------------------------|----|
|            | Xylose Breath Test .....                                                  | 51 |
|            | Glucose Breath Test .....                                                 | 53 |
|            | Lactulose Breath Test .....                                               | 53 |
|            | Taurine Breath Test .....                                                 | 54 |
|            | Ileal Dysfunction .....                                                   | 54 |
|            | Bile Acid Breath Test Combined with Fecal Analysis<br>of Bile Acids ..... | 54 |
|            | Combined Bile Acid and Xylose Breath Test .....                           | 54 |
|            | Steatorrhea .....                                                         | 54 |
|            | <sup>14</sup> C-Triolein Breath Test .....                                | 54 |
|            | <sup>13</sup> C-Trioctanoin Breath Test .....                             | 55 |
|            | Carbohydrate Malabsorption .....                                          | 55 |
|            | Lactase Deficiency .....                                                  | 55 |
|            | Sucrase-Isomaltase Deficiency .....                                       | 55 |
|            | Small Bowel Transit Time .....                                            | 55 |
|            | Hepatic Dysfunction .....                                                 | 56 |
|            | <sup>14</sup> C-Aminopyrine Breath Test .....                             | 56 |
|            | <sup>14</sup> C and <sup>13</sup> C-Galactose Breath Tests .....          | 56 |
|            | Drug Metabolism .....                                                     | 56 |
|            | Safety of <sup>14</sup> C Breath Tests .....                              | 56 |
|            | Clinical Relevance .....                                                  | 56 |
| CHAPTER 4. | Enteral Hyperalimentation .....                                           | 59 |
|            | Steven B. Heymsfield,<br>Jed Horowitz, and<br>David H. Lawson             |    |
|            | Protein-Calorie Starvation .....                                          | 59 |
|            | Epidemic .....                                                            | 59 |
|            | Consequences .....                                                        | 60 |
|            | Causes .....                                                              | 63 |
|            | Detection .....                                                           | 63 |
|            | Treatment Options .....                                                   | 64 |
|            | Enteral Hyperalimentation .....                                           | 65 |
|            | Chemical Formulas .....                                                   | 68 |
|            | Elemental Formulas .....                                                  | 72 |
|            | Polymeric Formulas .....                                                  | 72 |
|            | Modular Formulas .....                                                    | 72 |
|            | Mechanical Aspects .....                                                  | 73 |
|            | Indications .....                                                         | 74 |
|            | Gastrointestinal Disease .....                                            | 74 |
|            | Cancer .....                                                              | 77 |
|            | Renal Failure .....                                                       | 78 |
|            | Cardiac Disease .....                                                     | 78 |
|            | Major Injury .....                                                        | 78 |
|            | Burns .....                                                               | 79 |
|            | Dose and Rate of Administration .....                                     | 79 |
|            | Monitoring of the Patient .....                                           | 79 |

|            |                                                                          |     |
|------------|--------------------------------------------------------------------------|-----|
|            | Mechanical .....                                                         | 79  |
|            | Gastrointestinal Reaction to the Enteric Mixture .....                   | 80  |
|            | Impaired Assimilation .....                                              | 80  |
|            | Clinical Relevance .....                                                 | 81  |
| CHAPTER 5. | Infectious Diarrhea: Newer Knowledge and Current Concepts                | 85  |
|            | Charles D. Ericsson and<br>Herbert L. Du Pont                            |     |
|            | Environmental Control of Diarrhea .....                                  | 85  |
|            | Mechanistic Approach to Acute Infectious Diarrhea .....                  | 86  |
|            | Comparative Clinical Manifestations .....                                | 86  |
|            | Secretory Enteropathogens .....                                          | 86  |
|            | Intermediate Enteropathogens .....                                       | 87  |
|            | Invasive Enteropathogens .....                                           | 88  |
|            | Special Problems .....                                                   | 90  |
|            | Enteropathogenic <i>Escherichia coli</i> .....                           | 90  |
|            | Protracted Diarrhea .....                                                | 91  |
|            | Disaccharidase Deficiency .....                                          | 91  |
|            | Candidiasis .....                                                        | 91  |
|            | Giardiasis .....                                                         | 91  |
|            | Amebiasis .....                                                          | 91  |
|            | Bacterial Overgrowth Syndrome .....                                      | 91  |
|            | Antibiotic-Associated Colitis .....                                      | 92  |
|            | Newer Diagnostic Approaches to Infectious Diarrhea .....                 | 92  |
|            | Microbiology .....                                                       | 92  |
|            | Immunology .....                                                         | 93  |
|            | Tests of Invasiveness .....                                              | 95  |
|            | Approach to the Patient with Acute Diarrhea .....                        | 96  |
|            | When Diarrhea Occurs with Associated Cases .....                         | 96  |
|            | When Diarrhea Occurs as a Single Case .....                              | 97  |
|            | When Diarrhea Occurs in a U.S. Traveler to Developing<br>Countries ..... | 99  |
|            | Treatment of Diarrhea .....                                              | 100 |
|            | Fluid and Electrolyte Replacement .....                                  | 100 |
|            | Symptomatic Treatment .....                                              | 101 |
|            | Antimicrobial Therapy of Enteric Infections .....                        | 103 |
|            | Clinical Relevance .....                                                 | 105 |
| CHAPTER 6. | Inflammatory Bowel Disease: Immunologic Developments ....                | 109 |
|            | Witold Bartnik and<br>Roy G. Shorter                                     |     |
|            | Infectious Agents .....                                                  | 109 |
|            | Immunologic Features .....                                               | 110 |
|            | Food Allergy .....                                                       | 110 |
|            | Humoral Immunity .....                                                   | 111 |

|                                              |     |
|----------------------------------------------|-----|
| Cell-Mediated Immunity .....                 | 113 |
| Lymphocyte Cytotoxicity .....                | 115 |
| Gut-Associated Lymphoid Tissue .....         | 116 |
| Neutrophilic and Monocytic Functions .....   | 117 |
| Clinical Relevance .....                     | 118 |
| Conclusions and Outlook for the Future ..... | 120 |

CHAPTER 7.

|                                                              |     |
|--------------------------------------------------------------|-----|
| Inflammatory Bowel Disease: Newer Views of Genetic Influence | 129 |
|--------------------------------------------------------------|-----|

Richard B. McConnell

|                                |     |
|--------------------------------|-----|
| Familial Aggregations .....    | 129 |
| Distribution .....             | 129 |
| Possible Causes .....          | 130 |
| Positive Family History .....  | 130 |
| Nongenetic Clustering .....    | 132 |
| Genetic Markers .....          | 132 |
| Ankylosing Spondylitis .....   | 133 |
| Genetic Interpretation .....   | 134 |
| Twins .....                    | 134 |
| Environment and Heredity ..... | 134 |
| One Disease .....              | 134 |
| Clinical Relevance .....       | 135 |

CHAPTER 8.

|                                                                               |     |
|-------------------------------------------------------------------------------|-----|
| Functional Scintigraphy: Diagnostic Applications<br>in Gastroenterology ..... | 139 |
|-------------------------------------------------------------------------------|-----|

Robert S. Fisher and  
Leon S. Malmud

|                                      |     |
|--------------------------------------|-----|
| Hepatic Scintigraphy .....           | 139 |
| Methods and Experience .....         | 140 |
| Infectious Disease .....             | 141 |
| Trauma .....                         | 142 |
| Biliary Tract Obstruction .....      | 142 |
| Tumor .....                          | 142 |
| Other Uses .....                     | 142 |
| Hepatocystic Scintigraphy .....      | 142 |
| Methods and Experience .....         | 143 |
| Cholecystogastric Scintigraphy ..... | 143 |
| Methods and Experience .....         | 145 |
| Enterogastric Scintigraphy .....     | 147 |
| Methods and Experience .....         | 147 |
| Esophageal Scintigraphy .....        | 150 |
| Methods and Experience .....         | 151 |
| Gastroesophageal Scintigraphy .....  | 155 |
| Methods and Experience .....         | 156 |
| Gastric Scintigraphy .....           | 158 |
| Methods and Experience .....         | 159 |

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| Preparation of $^{99m}\text{Tc}$ -Labeled Chicken Liver .....      | 159 |
| Dual Isotope Gastric Scintigraphy .....                            | 159 |
| Meckel's Diverticulum Scintigraphy .....                           | 160 |
| Methods and Experience .....                                       | 161 |
| Scintigraphic Detection of Acute Gastrointestinal Hemorrhage ..... | 161 |
| Clinical Relevance .....                                           | 162 |

CHAPTER 9. Therapeutic Application of Biofeedback in Digestive Disorders 165

William E. Whitehead and  
Marvin M. Schuster

|                                                                                                                    |     |
|--------------------------------------------------------------------------------------------------------------------|-----|
| Requirements and Applicability .....                                                                               | 166 |
| Use in Esophageal Disorders .....                                                                                  | 167 |
| Influence on Gastric Acidity .....                                                                                 | 168 |
| Biofeedback Training to Raise Gastric pH .....                                                                     | 168 |
| Reduction of Gastric Acidity by Training in Relaxation .....                                                       | 168 |
| Effect on Gastric Motility .....                                                                                   | 169 |
| Influence on Intestinal Motility .....                                                                             | 169 |
| Biofeedback to Control Bowel Sounds .....                                                                          | 169 |
| Training Based on Intraluminal Pressure Recordings .....                                                           | 170 |
| Use to Control Fecal Incontinence .....                                                                            | 170 |
| Anal Sphincter Mechanisms .....                                                                                    | 171 |
| Applicability of Biofeedback .....                                                                                 | 172 |
| Saline Enema Biofeedback .....                                                                                     | 173 |
| Application to Management of Regurgitation with Rumination,<br>Hiccups, and Traumatically Acquired Dysphagia ..... | 173 |
| Clinical Relevance .....                                                                                           | 175 |

CHAPTER 10. Newer Gut Hormones and Hormone Candidates ..... 179

William Y. Chey and  
Chul H. You

|                                                     |     |
|-----------------------------------------------------|-----|
| Newer Aspects of the Established Gut Hormones ..... | 179 |
| Secretin .....                                      | 179 |
| Gastrin .....                                       | 184 |
| Cholecystokinin (CKK) .....                         | 184 |
| Newer Gut Hormones and Candidate Hormones .....     | 186 |
| Gastric Inhibitory Polypeptide (GIP) .....          | 186 |
| Biologic and Physiologic Actions .....              | 187 |
| GIP in Abnormal States .....                        | 188 |
| Pancreatic Polypeptide (PP) .....                   | 191 |
| Biologic Actions .....                              | 192 |
| PP in Abnormal States .....                         | 194 |
| Vasoactive Intestinal Polypeptide (VIP) .....       | 194 |
| Biologic Actions .....                              | 195 |
| Radioimmunoassay and Release .....                  | 197 |
| VIP in Abnormal States .....                        | 198 |

|                                                           |     |
|-----------------------------------------------------------|-----|
| Somatostatin .....                                        | 198 |
| Biologic Actions .....                                    | 198 |
| Somatostatin in Abnormal States .....                     | 201 |
| Motilin .....                                             | 201 |
| Biologic Actions .....                                    | 201 |
| Radioimmunoassay .....                                    | 202 |
| Bombesin-Like Peptides .....                              | 203 |
| Biologic Actions .....                                    | 203 |
| Substance P (SP) .....                                    | 204 |
| Neurotensin .....                                         | 204 |
| Biologic Actions .....                                    | 204 |
| Radioimmunoassay .....                                    | 204 |
| Gastrointestinal Glucagon-Like Immunoreactants (GLI) .... | 204 |
| Enkephalins .....                                         | 205 |
| Summary and Projection for the Future .....               | 205 |

|             |                                                                                              |     |
|-------------|----------------------------------------------------------------------------------------------|-----|
| CHAPTER 11. | Somatostatin: Effects on Pancreatic Exocrine Secretion<br>and Their Clinical Potential ..... | 213 |
|-------------|----------------------------------------------------------------------------------------------|-----|

Thomas A. Miller

|                                                                  |     |
|------------------------------------------------------------------|-----|
| Effect on Pancreatic Exocrine Secretion .....                    | 214 |
| Effect on Circulating Secretin and Cholecystokinin .....         | 214 |
| Effect on Secretin and Cholecystokinin Release .....             | 216 |
| Effect on Other Gastrointestinal Hormones .....                  | 218 |
| Mechanism of Action .....                                        | 218 |
| Physiologic Significance of Effects on Pancreatic Secretion .... | 219 |
| Somatostatin and Acute Pancreatitis .....                        | 220 |
| Clinical Relevance .....                                         | 222 |

|             |                                                                                                    |     |
|-------------|----------------------------------------------------------------------------------------------------|-----|
| CHAPTER 12. | Acute Viral Hepatitis: A Reassessment with Emphasis on<br>Serologic and Therapeutic Advances ..... | 225 |
|-------------|----------------------------------------------------------------------------------------------------|-----|

Gary L. Gitnick

|                                                 |     |
|-------------------------------------------------|-----|
| Hepatitis Agents and Serologic Assessment ..... | 226 |
| Hepatitis A .....                               | 226 |
| Hepatitis B .....                               | 227 |
| Non-A, Non-B Hepatitis .....                    | 228 |
| Nonspecific Assays .....                        | 229 |
| Antibodies to DNA .....                         | 229 |
| Serum Bile Acids .....                          | 229 |
| Carcinoembryonic Antigen .....                  | 229 |
| Post-Transfusion Hepatitis .....                | 229 |
| Fulminant Hepatitis .....                       | 230 |
| Transmission .....                              | 231 |
| Immune Mechanisms and Immunopathology .....     | 231 |
| Prevention .....                                | 233 |
| Immunoprophylaxis .....                         | 233 |

|             |                                                                    |     |
|-------------|--------------------------------------------------------------------|-----|
|             | Vaccines .....                                                     | 236 |
|             | Management .....                                                   | 238 |
|             | Clinical Relevance .....                                           | 239 |
| CHAPTER 13. | Nonsurgical Biliary Decompression .....                            | 243 |
|             | Raul V. Pereiras                                                   |     |
|             | Percutaneous Transhepatic External Biliary Drainage .....          | 243 |
|             | Technique .....                                                    | 244 |
|             | Percutaneous Transhepatic Internal-External Biliary Drainage ..... | 245 |
|             | Technique .....                                                    | 245 |
|             | Transhepatic Balloon Dilatation of Benign Biliary Strictures ...   | 248 |
|             | Technique .....                                                    | 248 |
|             | Percutaneous Transhepatic Internal Biliary Prosthesis .....        | 250 |
|             | Technique .....                                                    | 250 |
|             | Complications .....                                                | 251 |
|             | Conclusion .....                                                   | 257 |

# Chapter 1

## ENDOSCOPIC CONTROL OF GASTROINTESTINAL BLEEDING

Dennis M. Jensen

Upper gastrointestinal (UGI) bleeding is a common clinical problem. Although not all patients with UGI hemorrhage seek medical care or are hospitalized, estimates of admissions for UGI bleeding emphasize its frequency. One recent survey reported 86 admissions for UGI hemorrhage for a population of 165,000 during one year.<sup>63</sup> Elashoff and Grossman estimated that in the United States there were about 100,000 admissions in 1977 alone for UGI hemorrhage from peptic ulcer disease.<sup>22</sup> Hemorrhage stops spontaneously before or during hospitalization in 85 to 90% of patients with nonvariceal UGI bleeding. The remainder of this group, and those with variceal bleeding, often have more severe bleeding requiring multiple transfusions, intensive care unit management, and/or emergency surgery. Patients whose bleeding does not stop spontaneously also have a higher mortality rate.

In spite of many advances in clinical diagnosis, blood banking, and medical management, the mortality rate from acute UGI hemorrhage has remained between 8 and 10% for the last 30 years.<sup>2,69</sup> In the United States, there were about 5,000 deaths in 1972 from bleeding peptic ulcers alone.<sup>102</sup>

It has been reported that the mortality of

emergency surgery for bleeding peptic ulcer is 15 to 28%, whereas the risk for elective surgery in similar patients is only 0.4 to 3.0%.<sup>5,7,17,47</sup> The mortality of emergency portocaval shunt surgery for bleeding esophageal varices is 15 to 75% and the elective risk is 5 to 40%.<sup>21,55,56,68,98</sup> Surgical risk is much more dependent upon patient selection, skill of the surgeon, and underlying disease and physical condition in patients with variceal bleeding than in those with ulcer bleeding.

Perhaps overshadowing recent medical advances has been the increased percent-

**TABLE 1** FACTORS ASSOCIATED WITH  
INCREASED MORTALITY FROM UGI  
HEMORRHAGE

|   |                                                                                                    |
|---|----------------------------------------------------------------------------------------------------|
|   | Age older than 60                                                                                  |
|   | Presence of another major medical problem<br>exclusive of UGI hemorrhage                           |
| * | Persistent hypotension despite multiple<br>transfusions                                            |
| * | Transfusion of more than 6 units of blood                                                          |
| * | Active bleeding at endoscopy                                                                       |
|   | A nonbleeding visible vessel* or malignancy at<br>endoscopy                                        |
| * | Requirement for emergency surgery                                                                  |
| * | These can be controlled or influenced by an<br>effective and safe endoscopic hemostatic<br>method. |