

VOLUME ♦ ONE

MARGULIS AND BURHENNE'S

ALIMENTARY

TRACT

RADIOLOGY

FIFTH EDITION

Patrick C. Freeny
Giles W. Stevenson

VOLUME ONE

MARGULIS AND BURHENNE'S

ALIMENTARY TRACT RADIOLOGY

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IN MEMORIAM

While this book was in preparation, two of our contributors,

Wylie J. Dodds and **Martin W. Donner**, died.

These two scientists, clinical radiologists, and friends have been role models for a generation of radiology residents and gastrointestinal radiologists. They are very much missed, but their achievements and their modesty in making them, together with their warmth in support of young radiologists, cast a glow that has brightened the specialty over three decades.

Foreword

It is with pleasure and pride that we welcome and endorse the new edition of *Alimentary Tract Radiology* organized and orchestrated by the new pair of most distinguished editors, Drs. Patrick C. Freeny and Giles W. Stevenson.

During the four editions of *Alimentary Tract Radiology* (including a supplement on new cross-sectional modalities in the second edition), gastrointestinal radiology along with all medical imaging has undergone revolutionary changes. We recognized this by changing the name of the book from *Alimentary Tract Roentgenology* to *Alimentary Tract Radiology* starting with the third edition. Gastrointestinal radiology, as we've always considered it, covers the alimentary tube and its appendages—the liver and pancreas—which are examined by all imaging methods. It covers also

interventional radiology as applied to these organs. We have continued to expand our coverage of radiologic techniques, including nuclear medicine ultrasonography, computed tomography, and eventually magnetic resonance imaging. Mosby meticulously adheres to the high standards of superb reproduction of illustrations and refined printing.

We are happy that the new editors share our philosophy of making this book the international cutting edge final word on alimentary tract radiology. This assembly of exquisitely organized and executed chapters written by leading authorities around the world is testimony that this book will endure.

**Alexander R. Margulis
H. Joachim Burhenne**

Preface

The preface to the 1967 first edition of Alexander Margulis and Joachim Burhenne's *Alimentary Tract Roentgenology* begins "Alimentary tract roentgenology has undergone great expansion in the last two decades." Over 1200 pages then presented in great detail the current status of gastrointestinal radiology, with emphasis on barium radiology and fluoroscopy. Diagnostic angiography, percutaneous splenoportography, and transhepatic cholangiography were the spearhead trio representing the new advances of the 1960s.

Much of what we accept as routine today was not even conceived. There were no cross-sectional imaging techniques, such as transcutaneous or endoscopic ultrasonography, computed tomography, and magnetic resonance imaging; no endoscopy or therapeutic endoscopic procedures, such as retrograde cholangiopancreatography, endoscopic sphincterotomy and biliary tract stone removal, pancreatic or biliary stent placement, and gastroesophageal variceal sclerotherapy; no radiologically guided interventional procedures, such as percutaneous biopsy, catheter drainage of abdominal abscesses and fluid collections, biliary stent placements, and biliary stone dissolution or removal, percutaneous cholecystostomy, gastrostomy and enterostomy; and no therapeutic angiographic procedures, such as embolic or pharmacologic control of gastrointestinal bleeding or abdominal neoplasms, and creation of percutaneous portocaval shunts.

Needless to say, even the above list is incomplete, and new diagnostic and interventional procedures are being developed and introduced as this fifth edition is going to press. The only certainty, and a galling one to all the contributors, is that this fifth edition will be partly out of date by the time it appears and will certainly need major revision within 4 or 5 years.

The explosion in technology that has occurred during the previous four editions of this book has provided GI radiologists with one of the most interesting and challenging careers in medicine. It has also taken them from the isolated, darkened reporting rooms and fluoroscopy suites into the bright new world of computerized and digitized imaging techniques, and back to the mainstream of clinical medicine with ever-closer working relationships with surgeons,

gastroenterologists, nurses, and technologists—in the department, in the ward, and even in the operating rooms. GI radiologists have become the directors of new imaging and therapeutic techniques that have revolutionized the diagnosis and treatment of many diseases. With this move has also come a responsibility for defining the proper role of these techniques, evaluating their efficacy against older and more established methods, and providing our referring physicians with guidance through this labyrinth of expensive and amazing technology.

We are delighted to have contributions from three of the original 47 authors from the first edition: Drs. Amberg, Burhenne, and Margulis. There are many more new authors in the fifth edition, and we have included the work of colleagues from around the world, including England, Wales, Ireland, France, Switzerland, Germany, Belgium, Holland, Sweden, Hong Kong, and Japan, in addition to the United States and Canada. As in the first edition, we have deliberately allowed some overlap of material, and readers will find a diversity of opinion in a number of areas. We hope that the breadth of views and practice illustrated in this new edition will encourage radiologists to try different approaches in devising strategies to suit their own patients' needs.

No doubt there are errors, and we are responsible for these. We would like to encourage our readers to write to us with critical comments on the book, especially with suggestions for better coverage of important areas, for different approaches that you feel would be interesting or useful, and with notes of errors that should be corrected.

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**Patrick C. Freeny
Giles W. Stevenson**

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