

# CURRENT PRACTICE OF BILIARY SURGERY

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# Current Practice of Biliary Surgery

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# Foreword

*Current Practice of Biliary Surgery* by Dr. Gabriel A. Kune is most timely. Since surgery was first employed in the treatment of biliary tract disease, there has never been such an appreciation as now of its world-wide prevalence. At a meeting of the International Gastroenterological Conference in Copenhagen in July of 1970, the estimated incidence in the adult population of 23 countries was reported to range from 8 to 20 percent. During recent decades there has been an increasing acceptance of surgery for calculus biliary tract disease, so that operations upon the biliary tract presently are among those most frequently performed in general hospitals throughout the world.

The acceptance by the medical profession and laity of surgery in the treatment of biliary tract disease has come after an evolutionary process over slightly more than a century, resulting in safety, reduction of morbidity and mortality, and ease of accomplishment from the patient's point of view. Interruption of the disease and control of its complications have been achieved with diminishing risk to the patient. Furthermore, the surgical procedures have become less of a burden and therefore more acceptable. All surgery has made great strides since 1865. Diagnosis, preoperative preparation, anesthesia, selection of procedures, maintenance

of normal body function, and prevention and control of infection are a few of the factors that have placed surgery in its present position of acceptance as therapy for many of man's ills.

Dr. Kune has presented in 12 well-balanced chapters the essence of the current practices pertaining to surgery of the biliary tract. This unique accomplishment is attained in 383 pages of text, supported by over a thousand references, that portray the advances of surgical management since it began more than a century ago. The chapters on surgical anatomy and physiologic function are basic and are a subtle approach to the variations in structure of the biliary system and the pathologic changes that occur with disease. In nice sequence precise diagnosis follows with an evaluation of the roentgenologists' innovations that have contributed so much. Cholecystography and cholangiography—prior to, during, and after operation—have enabled the surgeon to become much better informed than were his predecessors about specific lesions and what could be anticipated.

Jaundice, not infrequently a trial and tribulation to physician and surgeon, is discussed on the basis of its various etiologies and associated pathologic changes. Dr. Kune places this problem in good perspective and optimistically points out that ways and means to its evaluation are improving. In the chapter Gallstone Disease, calculus formation and its unpredictable effects upon the biliary tract are detailed. The surgical attack aimed at curtailing the disease and preventing the complications it may give rise to is skillfully presented. A wide variation in surgical techniques that may be employed are described. These are presented in a concise manner without bias so that the reader may adapt them to what is in his hands most satisfactory. Interference of the bile flow from the liver to the duodenum is caused by obstruction and is labeled "stricture" by the author. This condition, whether caused by disease or related to surgical procedures (iatrogenic), remains a major problem for all surgeons who attempt to correct it. The author's review of the experience of large clinics throughout the world is in itself a contribution.

The incidence of benign and malignant tumors is proportionally less frequent in the biliary tract than in many other systems and organs, but it is of importance because of poor prognosis. The association of carcinoma of the gallbladder and cholelithiasis is a further indication for cholecystectomy for gallstones and is well documented by the author.

The recognition and surgical management of biliary cysts and cystic dilatations of the ductal system are a new integral component in surgical

texts. Differentiation between those of congenital origin and those acquired provides a basis for selective methods of management.

The role of infection as a cause of biliary tract disease is stressed by Dr. Kune, and its variation in different areas of the world is observed. The description of hepatic infections encountered in Hong Kong, for example, is most informative. As a complication related to obstruction in calculus disease, infection is of critical importance and accounts for much of the morbidity of complications. Gram-negative septicemia, particularly in the aged, is covered in detail, and current adjuncts such as steroids and anti-shock measures are placed in perspective. Indeed the author has brought up to date the control measures for sepsis in the biliary tract.

Selected and difficult-to-treat conditions including biliary peritonitis, fistulas with gallstone ileus, and other biliary intestinal fistulas are presented as unsolved problems. Encouraging advances are indicative of attention being directed toward them.

In summation the author has brought together in this volume the factual material that contributes to our recognition and management of the many facets of biliary tract disease in various decades of life. Surgery represents the most definitive form of treatment currently available. The selection of the surgical approach to be embarked upon and the technique to be employed, together with the sequelae and results to be anticipated, are vividly described and illustrated. The entire text is evidence that progress has been continuous, and reveals Dr. Kune's feeling that the entire field of biliary tract disease demands increasing emphasis. Although the title *Current Practice of Biliary Surgery* indicates its value to surgeons, I am sure that its contents are of major importance to internists and other members of the profession. The comprehensiveness of the author's material and the prevalence of biliary tract disease make this book an essential text for medical students.

FRANK GLENN, M.D.

# Preface

WITH THE EXCEPTION of acute appendicitis, biliary tract disorders are the commonest abdominal conditions that the surgeon, gastroenterologist, or radiologist encounters. Because of this frequency, it is disturbing that both the choice and the execution of the most appropriate form of management of biliary disease can often pose problems. There are still large gaps in our knowledge of the cause, pathogenesis, and methods of diagnosis of various aspects of biliary conditions. Surgery has its own special problems because of the relative inaccessibility of the bile ducts, which makes accurate operative diagnosis and the actual surgery difficult technical exercises on occasion. In addition, several alternative modes of treatment have been advocated for the same condition. These problems are magnified by the knowledge that the penalty for surgical errors is high in terms of patient mortality and morbidity. Therefore the biliary surgeon needs to be adequately trained in this exacting discipline and needs to be up to date with current knowledge of diagnosis and surgical treatment, so that he may carry out with safety the most appropriate form of management for each patient.

The aim of this book is to present an up-to-date account of the practice of biliary surgery that, within the limits of our present knowledge,



is based on scientific evidence rather than clinical impression and personal bias.

The approach is essentially clinical and practical. Biliary tract surgery should be effective yet safe, and therefore special attention has been placed on these aspects. Emphasis has also been given to an evaluation of the place and diagnostic accuracy of preoperative and operative investigations currently in use. When controversy exists between alternative modes of treatment, the available evidence for and against each is presented. This is followed by the author's appraisal of the most appropriate form of management, so that the reader is given a clear direction to pursue, yet after a review of the currently available evidence, the reader can still disagree and choose one of the other alternatives.

Approximately a thousand references are included for further reading and for more detailed study of the scientific evidence on which the various parts of this book are based. Most of the references are recent publications and not many are more than two decades old.

The author hopes that this book will be valuable to the practicing surgeon and that it will also interest the gastroenterologist and the radiologist. It should be useful also to those who are under the unenviable stresses of study for postgraduate surgical diplomas.

G. A. K.

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# Acknowledgments

*I am a part of all that I have met*  
—Tennyson: *Ulysses*

MANY OF MY COLLEAGUES contributed indirectly to this book by teaching me the art and science of biliary surgery, by allowing me to use clinical material for research and study, and by sharing with me the wisdom of their wide clinical experience.

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In the United States I was privileged to be First Assistant of Dr. Kenneth W. Warren, Chief of Surgery of the Lahey Clinic, Boston, justly regarded as the Mecca of biliary surgery. Ken Warren unselfishly imparted to me his immense experience and insight into the problems of complicated biliary tract surgery. This unique experience laid the foundation for my continuing interest and enthusiasm regarding the management and clinical research into difficult gallbladder and bile duct problems. I am also grateful to Dr. Bentley P. Colcock, Dr. Cornelius E. Sedgwick, Dr. John W. Braasch, and Dr. Robert E. Wise of the Lahey Clinic for their most stimulating influence. I am appreciative of the help and hospitality shown by Dr. William P. Longmire, Jr., of the University of California at Los Angeles during my meetings with him.

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The illustrations were drawn with artistry and skill by Miss Patricia Madden. The drawings and cholangiograms were meticulously photographed by Mr. Leslie Kont of the Department of Surgery, University of Melbourne. The entire manuscript was typed by Miss Jan Coxon, my secretary. I extend my thanks and gratitude for their long hours of hard work.

The publishers were most helpful and cordial in solving any problems that arose during the writing of this book. In particular I would like to thank Mrs. Lin Richter, Editor, Little, Brown and Company, whose vigor and enthusiasm were a great boost to my morale.

The foreword was written by Dr. Frank Glenn of New York, truly one of the fathers of biliary surgery in the United States. I deeply appreciate this signal honor.

G. A. K.

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