# EMERGENCY MEDICINE

AN APPROACH TO CLINICAL PROBLEM-SOLVING

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1991

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## **DEDICATION**

This book is written as a tribute to the memory of Harold Jayne, M.D. (1943–1986), an innovative educator and talented teacher. We miss him greatly.

The editors also make the following dedications:

To George and Maxine for their 60th anniversary. A small gift after a lifetime of love and support. To Lynda, James, and Kate for encouraging a dream and tolerating its fulfillment.

G. C. H.

To Jennifer who always guides me with her unfailing wisdom and support.

A. T. T.

To Katie for being. To Doug Lindsey for demonstrating that love, sweat, and the spirit of inquiry are the essence of teaching: the process is more important to the student than the information conveyed.

A. B. S.

To my wife, Sarah, and daughters, Jackie and Betsy, who soon forbade me to ever mention the word "chapter" in their presence but nevertheless remained patient and understanding.

G. R. S.

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### PREFACE

As is usually the case, this prologue is an epilogue. When we first met in early 1986 to discuss this book, our binding interest was to create a unique "course of study" in emergency medicine for medical students, residents, and practicing physicians. We agreed that the clinical approach in emergency medicine was different from other specialties, and traditional textbook formats did not capture its essence. We wanted to lay out the thought process of the practicing emergency physician when confronted with an undifferentiated patient complaint or presentation. We were aware of the fact that emergency physicians think in parallel. Thoughts on stabilization, evaluation, diagnosis, management, disposition, time limits, and the next patient run concurrently. We believed the unique aspects of our specialty could be communicated despite the sequential structure of the printed word. As educators, we wanted to convey the process as well as the content. In addition, each of us hoped to give something back to the specialty that has given us so much opportunity and satisfaction.

Though consuming our youth, emergency medicine has allowed us the chance to contribute to the real needs of many people, to share in creating a much needed discipline, and to work with a group of talented and dedicated academicians and clinicians who over the years have become friends and compatriots in our quest for quality in and recognition of our specialty. We hope this personal debt can be partially repaid by our writing a thoughtful delineation of guiding principles and supplying a framework for solving the many clinical problems that confront us daily.

As time and words have flowed, the motives for this book have remained the same, although the format and depth of coverage have evolved. The book has grown considerably in size since we first conceived of the project. Instructors of four- to eight-week clerkships and rotations in emergency medicine may find it useful to select key chapters rather than assign the entire text.

Though we have moved close to the "comprehensive textbook" size, much more could be written. We chose the topics representing those problems most often seen in the emergency department, thereby generating the greatest interest for the broadest readership. Many of the topics in this text have well-established management principles applicable to emergency medicine. In others we sailed uncharted waters to discover the "key" questions that drive our decisions.

Two purposes remained steadfast throughout. First, we wanted to systematically establish a workable approach to pursue an undifferentiated patient complaint from the prehospital setting to disposition. To do so, we struck a balance between redundancy to maintain each chapter as free-standing as possible and integration to illustrate the core concepts of the specialty. For example, common activities are repeated in the Prehospital and Initial Approach sections of many chapters. In the Diagnostic and Management sections, there is considerable cross-referencing to other chapters, and the emphasis is on principles rather than details of

care. Second, we have sought to answer the difficult questions facing emergency physicians in their clinical practice: What information is important to gather and how valuable is it in differentiating specific clinical possibilities? How much assessment is necessary before consultation or disposition? Which patients go home and which are admitted to the hospital? If admitted, when is a critical care unit appropriate? If discharged, what information, cautions, and plans for follow-up are given? Importantly, what information is necessary to document on the patient's chart? In offering at least one set of answers we tried to give the reader an understanding of the information and the thought processes necessary to make these decisions. As is appropriate, we take full responsibility for our recommendations, and we invite the readership to communicate their concerns, corrections, and comments.

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June, 1990

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In Dayton: Great indebtedness to and sighs of relief from Sheila Maston, Shirley Foreman, and Linda Crook from the Department of Emergency Medicine. Also sincere gratitude to Carol Enigk, Director, and to the staff of the Word Processing Center at the Wright State University School of Medicine for maintaining and revising the entire text during its many stages.

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In general: Thanks to Jerris Hedges, M.D., and Thomas Matthews, M.D., who took the time to review several manuscripts for format, content, and accuracy. Finally, our deepest appreciation to the 60-plus authors who created the substance of this text. In the face of multiple commitments they accepted our many communiques, adapted as we matured the format, and worked as hard as we did to codify and communicate the reality of our specialty.