REECE–CHAMBERLAIN

MANUAL OF EMERGENCY PEDIATRICS

Edited by

ROBERT M. REECE, M.D.

SECOND EDITION

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John Winslow Chamberlain, M.D.

The specialty of pediatrics has long ceased to be merely a provider of good health supervision in youngsters from families of upper economic status, most of whom enjoy vigorous and enviable vitality. During the past several decades much has been added to the pediatrician's armamentarium, and now a greatly increased number of ailments in babies and children are being diagnosed and treated at all levels of society. One of the greatest improvements in practical knowledge has been the delineation of the area of pediatric emergencies and at the same time the formalization of the best approaches for treating each of these injuries.

Dr. Chamberlain was one of the first to see the need for emphasizing the field of emergency care for pediatric patients. He was a charter member of the American College of Emergency Physicians as well as a pediatric surgeon. For the past five years he helped to direct the Emergency Clinic at the Children's Hospital Medical Center in Boston. This *Manual of Emergency Pediatrics* contains much of the information he found to be valuable in caring for the unexpected catastrophe that can turn up in the office of any busy doctor or any active hospital caring for children.

Dr. Chamberlain recognized the great importance of solid training in general surgery before entering one of its specialties. After graduating from Harvard Medical School and a surgical internship in Rochester, he embarked on appointments of a general nature in several of the great Boston hospitals. He soon came

under the spell of Dr. William E. Ladd, the father of children's surgery in this country, who was the professor and chief of general surgery at the Boston Children's Hospital. With Dr. Ladd, he completed the study of all aspects of surgery in children and babies. We who knew him at that time were pleased and privileged to be working alongside an intern and resident of the very highest quality. On many occasions in his later life, Dr. Ladd would comment upon his feeling that John Chamberlain was one of the best men he had ever trained.

In 1940, at the end of his residency years, Dr. Chamberlain entered the Naval Medical Corps, wherein he served until 1946. He was held in very high regard by his naval superiors, a circumstance brought about by two factors: First, he was a man with an extensive background in rare children's surgery (which has little to do with warfare injuries), and yet he did a superb job with military reconstructive surgery. Secondly, he was a civilian physician who was able to gain the respect of large numbers of men under him and to organize them into efficient units with high morale. His success in the Navy is demonstrated by the fact that at his retirement he was a full commander.

In his distinguished career as a pediatric surgeon Dr. Chamberlain was surgeon-in-chief of the Lawrence Memorial Hospital, chief of pediatric surgery at the Mount Auburn Hospital, and chief of the pediatric surgical service at the Boston City Hospital. For many years he was chief of surgery in the Students Clinic at the Massachusetts Institute of Technology. For half a decade before his death on January 21, 1974, he developed and gave imaginative direction to the rapidly expanding and important emergency service at our institution. He held teaching positions at both Harvard Medical School and the Boston University School of Medicine.

To have known this man brought great delight and satisfaction to a wide circle of friends, including doctors, nurses and nonprofessional people. His technical excellence as a surgeon was universally recognized. In addition his was a personality encompassing gentleness, quietness, courtesy and sympathy. All who knew him feel great loss in his demise, but yet we appreciate how much children of the current and future generations will benefit because of the contributions he made.

September 4, 1974

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FOREWORD

Some 45,000 children come annually for care to the Pediatric Emergency facilities at Boston City Hospital. Like any pediatric practice, the problems of these mostly inner-city patients are those large and small events which place children at risk everywhere. These complaints range from a life-threatening emergency to common upper respiratory infections. Whether the event is an accident or a poisoning, neurological or cardiac in origin, it is in the emergency setting that infants and children experience significant morbidity and mortality.

Considerable investigation has shown that in the hospital emergency setting most children who are seen have nonemergency conditions. This is also true in the physician's office. As this manual reminds us, there exists a body of knowledge necessary for adequate pediatric management of these conditions as well as for the management of true emergencies.

Another important function of this manual is that it offers guidance and reassurance to those providing health care. Too often it is assumed that it is the patient or parent alone who needs reassurance; often it is the front-line health professional who needs to be reassured. This includes the most sophisticated and knowledgeable physician as well as the pediatrician who recognizes that a well-known patient has an unusual complaint. More often the physician encounters an unfamiliar patient, since frequently emergency care is sought in a facility where the child is not known. Occasionally a health professional who does not usually care for children will be involved in the pediatric emergency and will also require guidance and reassurance.

The manual can be used in different ways in different settings. To the professional unfamiliar with children, it can be a guide

through difficult terrain. To the experienced, it can be a quick review of priorities or a rapid summary of unusual findings. Occasionally it may remind the physician of a valuable diagnostic test or a possible intervention. It can also help prevent the reliance on unnecessary and dangerous procedures and investigations that are too often ordered and performed for alleged legal reasons.

The manual begins with discussions of true emergencies, since these conditions require immediate intervention. It appropriately deals with the most common problems encountered in Emergency Departments. The sections which follow (Presenting Complaints, Diagnostic Entities, Procedures and Therapeutics) present, in logical sequence, diagnostic and therapeutic considerations in a clear and thorough style and reflect the experience of Dr. Reece and his colleagues.

In addition to the valuable information concerning specific diagnosis and treatment, the authors are concerned with understanding the behavior necessary in the management of such situations as the death of a child, sexual assault, or child abuse. All too often we forget or ignore the emotional needs of the family during the emergency and also ignore life stresses which may result from or may even have caused the emergency. The manual might remind the physician of the importance of a social worker or clergyman in managing the emergency, or emphasize the need to provide psychosocial supports to prevent a complication or a more severe illness in the patient or crisis in the family.

No manual can offer clinical judgments, and therefore this book will be no better than the professional who uses it. Properly used, it is a handy adjunct to good judgment and an important aid in the emergency care of children, whether in the physician's office or in the hospital emergency room.

JOEL J. ALPERT, M.D.

PREFACE to the SECOND EDITION

The field of emergency medicine has grown logarithmically since the first edition of this Manual was published in 1974. The reasons for this are complex and numerous, but the variety of cases seen in so-called Emergency Rooms seems practically without limit. It is for this reason that this second edition has been reorganized completely and new contributors have provided wide-ranging and substantial new authoritative information.

Part I of this edition of the Manual addresses True Emergencies or conditions which are most likely to be life-threatening. Part II discusses the physician's approach to common presenting complaints as they usually appear in a first-contact setting. Part III of the Manual deals to some degree with organ system entities. It has been difficult to make some decisions regarding the inclusion and exclusion of certain problems and conditions which are not strictly first-contact problems but for which this Manual might conceivably be consulted. Apologies are made for the omission of certain topics which may appear to belong in a book of this nature; I trust that readers will understand the need to limit the size of the Manual and will consult the numerous excellent pediatric reference texts that are available if a more complete compendium of pediatric information is desired.

Finally, I want to thank the contributors, whose enthusiasm, cooperation, and friendship have made this effort a rewarding one both professionally and personally. My gratitude also goes to John Hanley, Medical Editor at Saunders, for his support, suggestions, and friendship; to Diane Forti, whose precision, care, and syn-

tactical expertise have made this book more readable; and finally to the staff at Saunders, whose professional approach has made the production of this manual so enjoyable.

ROBERT M. REECE, M.D.

PREFACE to the FIRST EDITION

Although Emergency Department experience lends credence to the contention that parents are often more frightened than their children are hurt, there are a great many illnesses and injuries of infants and children that require urgent treatment. In some parts of the country, where the number of family physicians and pediatricians is inadequate to meet the needs of the population, a large part of the childhood population may be brought to the Emergency Department with complaints which are not urgent. There is no valid excuse for turning these patients away without some attention and advice. In such areas the role of the Emergency Department physician must include playing the part of the family physician.

This manual is meant to serve as a guide to both medical and surgical emergency care of sick and injured children. Hopefully, it will provide the responsible individual with readily available assistance in making a diagnosis, in instituting appropriate treatment, and in recommending follow-up treatment. The reader will search in vain for anything new to the medical profession. Material used in the text has been appropriated from many sources in the literature, a few of them indicated by references listed at the end of some of the sections. Parts of the text have been made more comprehensive and useful by the recommendations of colleagues who have been most generous of their time and advice. Where there is more than one recognized form of therapy, the authors have presented only the one that appeals to them.

Part I of the manual deals with an Emergency Department's administrative policy and advice regarding legal matters. Part II

outlines suggestions for the work-up and management of most medical and surgical problems of early life encountered in an Emergency Department and in office practice. The subject matter is arranged so that diagnoses, complaints, and a few subspecialty groupings appear in alphabetical order. Cross references are provided where needed. Part III is the Appendix.

If this manual meets currently unfilled needs in the Emergency Departments of hospitals accepting pediatric patients, in the private offices of physicians, and in community health facilities, and if it contributes significantly to the care of children in those settings, we will have accomplished our purposes.

ROBERT M. REECE

JOHN W. CHAMBERLAIN