# podopediatrics

SECOND EDITION

HERMAN R. TAX

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Editor: Jonathan W. Pine, Jr. Copy Editor: Stephen C. Siegforth Design: Bob Och Illustration Planning: Wayne Hubbel Production: Anne G. Seitz

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Accurate indications, adverse reactions, and dosage schedules for drugs are provided in this book, but it is possible that they may change. The reader is urged to review the package information data of the manufacturers of the medications mentioned.

Made in the United States of America

First Edition, 1980 Reprinted 1980

Library of Congress Cataloging in Publication Data

Tax, Herman R. Podopediatrics.

Includes bibliographical references and index.

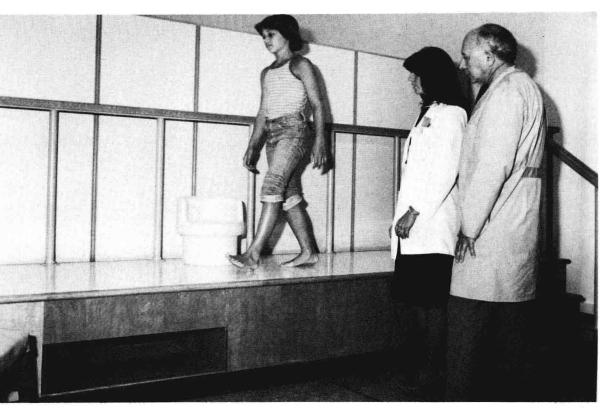
1. Podiatry. 2. Extremities, Lower—Abnormalities. 3. Pediatric orthopedia. I. Title. [DNLM: 1. Foot Diseases—in infancy & childhood. WS 270 T235p] RD563.T39 1985 617'.585 84-7576

ISBN-0-683-08118-7

Composed and printed at the Waverly Press, Inc.

## podopediatrics

SECOND EDITION



A uniquely designed examining platform for children in the Podopediatrics Clinic of the Ohio College of Podiatric Medicine as detailed in Chapter 5 by the author.

Dr. Tax

Dedicated to the Tax's—
from whom there is no escape—
and with deepest devotion to one called
Ruth.

### Foreword to the Second Edition

"He that wrestles with us strengthens our nerves and sharpens our skill. Our antagonist is our helper" (1).

For an orthopedist to write a foreword for a text in podiatric medicine may seem a bit strange since present history would have us in contesting positions, but surely we have learned by now that truth and knowledge are not the preserve of any single group.

It has been said of medicine "that it is the only profession that labours incessantly to destroy the reason for its own existence" (2), and by doing so it strives for excellence and continues to progress.

In this new edition of his already well known book, Dr. Tax has gone well beyond his original concept. He has enlarged the original in order to address new concepts while providing a better understanding of the old. We are constantly being inundated by facts—to such an extent that they must of necessity be stored on microscopic chips in integrated circuits. Dr. Tax has turned these facts into knowledge, and at the same time has made the whole both understandable, read-

able, and enjoyable. I have watched him labor over the new edition for long hours through several years. This book is as good as it is possible for any intelligent, inquisitive, conscientious, and hard working professional to produce. It is simultaneously a labor of love and the distillation of a lifetime of experience. It belongs on everyone's bookshelf.

#### Philip Newman, M.D., FAAOS

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#### References

- Edmund Burke (1729–1797): "In Reflections of the Revolution"
- James Bryce: "Address at a dinner for General Gorgas (March 23, 1914)

### Foreword to the Second Edition

Practitioners and students confronted with problems affecting the lower extremities of children often are required to seek out several texts and periodicals in order to evaluate their young patients and develop appropriate treatment plans. This comprehensive volume by Herman R. Tax, D.P.M., provides the data base that would satisfy the needs of most clinicians with a serious interest in the field of podopediatrics. It is approached from the point of view that many of the problems that children manifest in their pedal extremity require a strong background in developmental biology. Few texts concerning this aspect of clinical medicine provide such emphasis. In addition, the use of comparative anatomy by the author helps the practitioner understand the problems of human locomotion and to devise patient management approaches that are both rational and scientifically valid.

Dr. Tax shares his wealth of experience as a practitioner, professor, and serious student in the field of podopediatrics. He bridges the gap between the basic sciences and clinical practice in a smooth and balanced fashion which results in a volume that is practical for both the new and experienced clinician and stimulating to the accomplished and future investigator.

Leonard A. Levy, D.P.M., M.P.H.

Dean and Professor of Podiatric Medicine, University of Osteopathic Medicine and Health Sciences, College of Podiatric Medicine and Surgery, Des Moines, Iowa

## Foreword to the First Edition

Dr. Tax's volume of podopediatrics is the result of many dedicated years of study, personal research, teaching, and clinical experience in the field of children's foot health. It is, in essence, a one-volume encyclopedic treatment of the subject. This work is all the more remarkable as leaders in the field of medical science are now advocating an interdisciplinary approach to the study of each patient's medical diagnosis and treatment. Dr. Tax anticipated this modern approach to medical care in this text. He has presented the various medical disciplines, their interrelations, and their utilizations in the unified medical approach to the podopediatric patient.

This volume runs the gamut of podopediatric

care from anthropology and evolution through embryology, anatomy, orthopedics, pediatrics, dermatology, and neurology, and pursues the patient even into the area of footgear-related problems.

This is a volume for every member of the healing arts to own for ready reference to all aspects of the subject.

Isidore Freed, M.D.

Fellow, American College of Chest Physicians Fellow, American College of Cardiology

## Preface to the Second Edition

The second edition of Podopediatrics attempts to do what second editions should. This new edition is like the mortar added to the original building bricks. It carefully fills in those areas in each section that were formerly held to a minimum to conserve space and to minimize expense. In the new edition, almost every section of every chapter is addressed to make the book more complete and to emphasize the most essential features. The number of illustrations have been greatly increased in order to clarify the text wherever possible. New material which I consider vital to a well rounded understanding of children's foot health has been included. I believe this gives this edition an exciting dimension.

The first edition attempted to give the podiatric student an overview of the subject of the infant and child in a fairly general way, while orienting the material toward basic conservative podiatric principles and treatment. However, the surgical and sports medicine areas of podiatric medicine have come along at such a rapid pace that it makes it necessary to address these specialties in order to further round out the subject of children's foot health. At the same time I have placed great emphasis on the need for a healthy conservative approach to the needs of the child, as compared to those of the adult.

When I wrote the first edition, I mentioned how difficult it was to obtain qualified informed opinions on many of the problems concerning the foot health of children. It is interesting to note that since *Podopediatrics* was originally published, medical texts concerned with chil-

dren's foot health have come alive with the subject, in many cases featuring it. For example, such areas of discussion as evolution, embryology, footgear, dance, and sports were formerly little mentioned. Today most pediatric orthopedic texts include these subjects. I am gratified that they do because I have always maintained that when one deals with children podiatrically and orthopedically, an understanding of when and where our musculoskeletal system was derived from, as well as how it is used, is important for a well rounded approach to evaluation and treatment. Toward this end, further appreciation of our bodies as the machines they are was emphasized. The child as athlete was considered, and the surgical approach to those problems not amenable to conservative care was evaluated as last resort therapy. My colleagues in podiatric medicine will have to carefully consider how to best approach these problems in their young patients.

I believe it was Francis Bacon who commented "some books are to be tasted, others to be swallowed and some few to be chewed and digested." I have tried to retain some flavor of my previous volume; I do hope this edition will not produce indigestion in any of my readers, but will be thoughtfully evaluated for what it has tried to accomplish. It was Aldous Huxley who said "A bad book is as much a labour to write as a good one, it comes as sincerely from the author's soul." I hope that my efforts will have resulted in a useful text for our profession.

Herman B. Tax, D.P.M.

## Preface to the First Edition

This book consists of an accumulation of notes and records based on some 40 years of experience with children's footcare, the field we refer to as podopediatrics.

The study of podopediatrics is especially important because children are not born with perfect feet. The foot of the newborn infant contains within its structure all the inherited and evolutionary features which may produce disability in the adult foot. Contrary to popular belief, shoes are not the primary cause of most foot problems. Proper care of the feet initiated in childhood can prevent in large part many of the problems seen in the adult.

There are very few books available at this time which bring together information about podopediatrics from the fields of general medicine, podiatric medicine, and other related sciences. This text is being written as a comprehensive manual in podopediatrics for ready briefing, thus enabling the student and practitioner to refer, if interested, to other excellent texts for detailed research.

This work is not intended to be an in-depth study of the various fields of medicine as related to and as part of the discipline of podiatric medicine. It is intended to whet the appetite of the student and practitioner by touching briefly and searchingly on the numerous facets of medical theory and diagnostic applications. The author does not pretend to be a neurologist, dermatologist, embryologist, pediatrician, roentgenologist, etc., but feels it is important to alert the student to the necessity of looking at the whole child before focussing on the lower extremity.

During the 30 years since my original text on podopediatrics was published, an enormous number of changes have taken place in the field of podiatric medicine, particularly in the area of children's foot problems. In my earlier text (1947), I wrote:

This book is written for a large group of clinicians engaged in treating the feet of children. It is in a sense an answer to the neglect and slipshod treatment that this portion of the child's body has received. Unfortunately, the bulk of information which parents receive today regarding the feet of their children comes from nonmedical sources.

Since this was written, the approach to the care of children's feet has improved dramatically in knowledge and in application of sound principles of treatment. However, the broad dissemination of information to medical practitioners and to parents has not kept pace with this important area of care. Therefore, the delivery and quality of treatment today are generally chaotic. The podiatric specialist is seeking to standardize proper care for the feet of children and is attempting to lead the way to sound scientific application of podopediatric principles.

In this book, my personal experiences are often used as an overlay on already well expressed medical opinions of both foregoing and contemporary investigators. Some of the material is based on original research; much of it is based on other people's work.

This is a time in the history of medicine when often the quality of medical delivery is likely to be dictated by expediency and when there is deep division between the medical disciplines. There is no doubt that the rush today is to the more radical and exotic forms of therapy. For this reason, I have tried to simplify the approach to problems wherever possible, while trying to avoid the hazards of oversimplification. Examples of this will be found in such topics as pronation, orthotics, and treatment of metatarsoadductovarus. In most cases, simple conservative measures still produce the best results, and I would advise my colleagues to adhere to such programs whenever possible. One such rule would dictate the avoidance of surgical procedures in asymptomatic foot problems.

I have not hesitated to break with traditional concepts in theory and treatment when I found that they were just a burden to the student, without adding to the successful comprehension of the problem.

Herman B. Tax, D.P.M.

## Acknowledgments

My sincerest gratitude to those exceptional people in our medical community, to the educators, clinicians, faculty, and staff of the various associated disciplines in medicine who were so completely free of narrow professional prejudice that they were enabled to give of their knowledge and support without stint to make this volume of *Podopediatrics* (hopefully) of value to all.

#### My special thanks to:

Dr. E. Lloyd DuBrul, Professor Emeritus of the Department of Anatomy and Oral Anatomy at the College of Medicine and Dentistry, University of Illinois, from whose brilliant anatomical treatise and sketches concerning biomechanics of the body I borrowed so heavily.

Dr. Asher Rabinowitz, dermatopathologist, for his kindness in reviewing my chapter on dermatology.

Dr. Richard Schachter, Diplomate of the American Board of Podiatric Surgery and Associate Professor at the New York College of Podiatric Medicine, for his review and suggestions which helped to clarify many of the surgical techniques in the chapter on surgery.

Dr. Mark Caselli, Director of the Children's Clinic at the New York College of Podiatric Medicine, for allowing me to utilize some of the material from his articles on pediatric immunization, emergencies, and medication for children.

Victor M. StanCarone, Exercise Physiologist and Physical Fitness Director, for his review and additions to my chapter on sports medicine.

Alice Overton, Managing Editor, and the editorial staff of the *Journal of the American Podiatry Association*, for allowing me to borrow material from my articles on primary preventive podopediatrics and diastematomyelia.

Dr. Irwin Hanover, Editor Emeritus, and Dr. Charles P. Cangialosi, Editor, of the *Current Podiatry Journal* for their permission to utilize material from some of my articles.

Dr. Richard Baerg, Director, Podiatric Medi-

cine, Veterans Administration Central Office, for his continuing support.

Dr. Leonard A. Levy, Dean College of Podiatric Medicine and Surgery, University of Osteopathic Medicine and Health Sciences, Des Moines, Iowa.

Professor Karl K. Klein, The University of Texas at Austin, Department of Physical and Health Education, for his contributions on the lower extremity.

#### My thanks to:

Peter Baglio, Director; Dr. Oscar Serlin, Chief of Staff; Frederick Manuel, Administrative Assistant to Chief of Staff; Dr. Christine Machiedo, Associate Chief of Ambulatory Care; and Dr. Harvey Hechel, Associate Chief of Staff for Education, for their continuing support at the VA Medical Center, East Orange, New Jersey.

My professional colleagues at the VA Medical Center, with special thanks to Dr. Philip Newman, Chief of Orthopaedics, a most energetic and delightful personality. He was exceptionally helpful in every way, and we spent many hours in philosophical, academic, and clinical discussion.

My able and well informed secretary, Mrs. June E. Smith, whose services were deeply appreciated.

Mr. Robert Braxton, Margaret Ward, R.N., and Alicia M. Gaskins for their clinical assistance and for the help of the two Senior Certified Orthotists at the Medical Center; Mr. R.L. Palumbo; Mr. J.J. Ahearn; and Mr. Frank DiLiegro for pharmaceutical advice.

#### My thanks:

To my professional colleagues and administrative staff personnel at the New York College of Podiatric Medicine for their support and help in so many ways. To Horace DeCotiis, President; Thomas M. DeLauro, Dean; Michael J. Valletta, Director of Clinical Education; Joseph C. D'Amico, Chairman of Orthopaedic Sciences;

Mark A. Caselli, Director of Pediatrics; Dr. David George, Dean of Post Doctoral Education; and Dr. D'Amico and Dr. Caselli were particularly generous in allowing me to pursue my clinical interest in *Podopediatrics* with full freedom.

To Dr. Edward Rzonca for his clinical assistance and to Susan Hunt for her secretarial help.

To my exceptionally bright and devoted students who were so very helpful, Dr. Pamela Karman and Dr. Deardre Nadel, both now my colleagues in podiatric medicine.

#### My thanks to:

My colleagues and friends at the Ohio College

of Podiatric Medicine for their continued support in my work with children.

Dr. Abe Rubin, President; Dr. Frank Ganis, Dean; and Dr. Valerie Persons, Director, of the Children's Clinic.

Dr. Margaret Konecky for her help in assembling material for the section on ballet, and to Terry Landers for his fine line drawings for the section on biomechanics.

My sincere appreciation to Jonathan W. Pine, Jr., Editor and the extremely helpful and efficient staff at Williams & Wilkins.

And as always to Ruth, Jonathan, Richard, Jason, and Aaron.

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