

SECOND EDITION

# HYPERTENSION

IRVINE H. PAGE, A.B., M.D.

DIRECTOR, RESEARCH DIVISION  
CLEVELAND CLINIC FOUNDATION  
PRESIDENT OF THE AMERICAN HEART ASSOCIATION

Rx

*A first prescription  
for patients with  
high blood pressure*

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defined treatment, evaluates  
new drugs, and shows what  
drugs and treatment are  
obsolete in view of recent  
findings.

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# HYPERTENSION

A MANUAL FOR PATIENTS

*With High Blood Pressure*

*(Second Edition)*

BY

IRVINE H. PAGE, A.B., M.D.

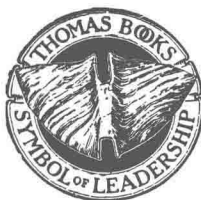
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CHARLES C THOMAS · PUBLISHER

SPRINGFIELD · ILLINOIS · U.S.A.

CHARLES C THOMAS · PUBLISHER  
BANNERSTONE HOUSE

301-327 EAST LAWRENCE AVENUE, SPRINGFIELD, ILLINOIS

*Published simultaneously in The British Commonwealth  
of Nations by*

BLACKWELL SCIENTIFIC PUBLICATIONS, LTD.,  
OXFORD, ENGLAND

*Published simultaneously in Canada by*  
THE RYERSON PRESS, TORONTO

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*Copyright 1943 and 1956, by CHARLES C THOMAS · Publisher*

*First Edition, First Printing, September 1943*

*First Edition, Second Printing, October 1943*

*First Edition, Third Printing, January 1944*

*First Edition, Fourth Printing, June 1944*

*First Edition, Fifth Printing, December 1947*

*First Edition, Revised Sixth Printing, November 1951*

*Second Edition, March 1956*

*Library of Congress Catalog Card Number: 56-6399*

PRINTED IN THE UNITED STATES OF AMERICA

## HYPERTENSION

*To*  
BEATRICE ALLEN PAGE  
*My Wife*

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## PREFACE TO SECOND EDITION

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FOUR years ago a revised sixth printing of this manual appeared. It allowed me to make a number of corrections. But knowledge in the field of hypertension and arteriosclerosis is advancing so rapidly, it has seemed necessary to revise more adequately. In particular, treatment has become more sharply defined, new drugs have been introduced, and, almost as importantly, others have been less emphasized or discarded.

Treatment of severe hypertension remains as difficult as ever, but the results are more gratifying. It is currently like treatment of diabetes twenty-five years ago. If both physician and patient are conscientious and cooperative, the results are often good. Occasionally, treatment is a complete failure despite all efforts. But these failures are becoming less common and the percentage of successes is rising. This is not to say that any of us is within even striking distance of our goal, but we are on the way. After twenty-five years of close study of these cardio-

vascular diseases, I feel greatly encouraged not only because the understanding and cooperation of the patient is so much improved but chiefly because the quality and quantity of both bed-side and laboratory research have increased. I hope for the future that sufficient maturity of judgment will be exercised so that each proposed new drug, or mode of treatment, will quickly be evaluated and put into its proper perspective without the disruption caused in the past by overenthusiasm for inadequately studied, proposed remedies. I think recent performance in the introduction of new drugs suggests that this is not too much to expect.

To patients, I think it can be said with assurance that your doctor now has an infinitely better understanding of this great group of cardio-vascular diseases than he did only a few years ago. I hope that you will recognize the need for following his advice implicitly, for it is this cooperation which is essential to the successful use of modern drugs in the treatment of hypertension. Each reprinting and new edition has had the invaluable help of Mrs. Raymond F. Strattan and Dr. A. C. Corcoran.

I. H. P.

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## PREFACE TO REVISED SIXTH PRINTING

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SIX years have passed since the appearance of this book. Two things justify a revision of it: first, enough new or warmed over attempts have been made to cure hypertension to confuse completely the average patient; second, the author has found enough omissions and inadequacies to welcome the chance. There is one thought I would add. While no simple cure for most types of hypertension is at hand, still there are now several procedures which aid greatly in some patients but not in others. Unfortunately, at the present time, no method is known of deciding who will be benefited, so we perforce must go our blundering way of trial and error. But significant advances have been made in understanding the disease and the advances are much more rapid today than six years ago. It almost seems that the indifference and lethargy of the past is being discarded and that research will prevail. If this is so, and I think it is, the future of the hypertensive is bright, even though present treatment must



seem pedestrian, complicated and unsure.

In the preparation of this book, I owe most to my long time friend and associate, Dr. A. C. Corcoran. Dr. Robert Taylor, another of my most valued colleagues, and members of the staff of the Cleveland Clinic Foundation have been constant sources of stimulation and inspiration.

Mrs. Raymond F. Strattan has continued her patient and expert help in the preparation of this as well as the previous printings.

I. H. P.

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## PREFACE TO FIRST FIVE PRINTINGS

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THIS manual has grown out of many interesting discussions on high blood pressure and its problems that I have had with hypertensive patients. It is presented in the hope that the thoughts we have exchanged may be of benefit to others. It is written not for physicians but for laymen.

I have experienced the happiness and sorrow of many of these patients and their relatives. To them I am grateful. Certain friends have shared generously with me their stores of human understanding and sympathy. I can mention only a few: Dr. G. H. A. Clowes, Dr. D. D. Van Slyke, Dr. Arthur Fishberg, Dr. M. Herbert Barker, Dr. Murray Steele, Dr. Lee Farr, Dr. Norman Freeman, Dr. E. V. Allen have never failed to keep faith with the high principles of scientific medicine.

For the background of knowledge on which this book depends my associates in our clinic have given me most: Dr. A. C. Corcoran, Dr. P. J. Fouts, Dr. O. M. Helmer, Dr. K. G. Kohl-

staedt, Dr. G. F. Kempf, Dr. R. D. Taylor, Dr. A. A. Plentl, and my friends among the technical staff and nurses. Mrs. Raymond Strattan and Miss Helen Slupesky have helped patiently in the preparation of the manuscript.

I. H. P.

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# CONTENTS

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Preface to Second Edition . . . . .	vii
Preface to Revised Sixth Printing . . . . .	ix
Preface to First Five Printings . . . . .	xi
The Purpose of the Book . . . . .	3
The Disease . . . . .	5
The Examination . . . . .	28
The Management of Hypertension . . . . .	45
Research on Hypertension . . . . .	97
Index . . . . .	103

## HYPERTENSION



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## THE PURPOSE OF THE BOOK

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THE person who is suddenly told he has high blood pressure is frightened and bewildered. Even physicians discovering the disease in themselves are nearly as bewildered and rather more frightened. And so in this book I have attempted to give the patient an insight into his illness that he may be spared some of the dismay and alarm and avoid the quackery that will assail him from every side. Clearly, it is not intended to exhaust either its subject (of which it gives only a meager outline) or the hypertensive who reads it.

Of course no book can replace the human warmth, understanding and counsel of the physician. For this reason, among the many, it is vital that the patient consult his physician regularly. But at those times when such a visit is impossible, this book may provide the needed assistance. A book can sum up much that the physician may wish to impress on the pa-

tient and call to mind questions needing discussion with him.

In writing it, I have tried to explain:

FIRSTLY, what hypertension is.

SECONDLY, the purpose of the various examinations given to persons with high blood pressure; and

THIRDLY, what can be done about it.



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## THE DISEASE

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**I**T IS important that you understand something about the nature of the disease from which you suffer. Blood pressure has to be persistently high before it is considered abnormal. Sporadic bouts of elevated pressure are usually due to some emotional or physical stress. There are many ways this elevation can be brought about, and that is why the treatment is not the same for all patients.

Perhaps we could begin by defining a few words that will constantly recur in any discussion of hypertension. You have probably seen these words before. They are:

(1) **ARTERY**: a large, thick-walled vessel which carries blood out from the heart to the various parts of the body. You can recognize arteries because they pulse.

(2) **ARTERIOLES**: the smallest branches of arteries are called arterioles. They are too small to be seen by the unaided eye. But, because their walls are made of muscle, like those of arteries, they can constrict (become smaller) or dilate (open wider). In hypertension, they constrict.