ALLERGY IN PEDIATRIC PRACTICE

SHERMAN AND KESSLER

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Plate I.

A, Passive transfer tests. Sites immediately after injection of serum, showing number and arrangement of sites, method of marking, and nonspecific reaction to serum.

B, Passive transfer tests. Reactions of sites to testing on following day, showing variations in reactions to different antigens, from negative to marked.

C, Chronic eczema in popliteal and gluteal folds of girl 5 years of age.

D and E, Chronic eczema in girl 6 years of age with four-year history of allergic eczema, showing changes in skin of wrists and feet.











E.

PLATE II.

A, Chronic eczema in boy 8 years of age with long history of eczema, showing chronic changes in popliteal areas.

B, Depigmentation of hands in 4-year-old Negro boy after recovery from severe infantile eczema.

C, Intracutaneous skin tests. From left to right, the first and second blebs show slight (one plus) reactions; the third, negative, showing size of residual bleb; the fourth, marked (three plus) reaction with pseudopods. The mark on the skin indicates 1 cm.

D, Passive transfer tests. Enlargement of Plate I, B to show individual reactions to different antigens.

E, Infantile eczema in baby 13 months of age with acute, generalized weeping dermatitis.

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PREFACE

A large proportion of the infants and children suffering from allergic diseases are necessarily treated by general practitioners and pediatricians without special training in allergy. This book is intended to offer such physicians practical aid in the diagnosis and treatment of these conditions.

It presents in detail the views and methods that we have found most useful in actual practice. Most of the material included is familiar to, and accepted by, the majority of specialists in the field. However, there are certain problems, both theoretical and practical, on which various authorities hold sharply divergent opinions. An attempt has been made to indicate the existence of these differences of opinion and to differentiate fact from theory, but the desire to keep the book simple and practical does not permit detailed and impartial presentation of all points of view on controversial problems.

In keeping with the intent of the book, many conditions which have been suspected of being allergic on scanty or inadequate evidence receive little or no mention. Attention is focused on those diseases in which allergic methods of diagnosis and treatment have proved of real practical value.

A certain amount of basic scientific background is included. It is believed that this knowledge is essential for intelligent use of the actual diagnostic and therapeutic methods. Since the book is intended for practitioners without special training in the field, it seems safe to assume that this information is either new to them or long since forgotten.

The citation of references to other publications is intended to indicate relatively few sources from which more detailed information and bibliographies may be obtained. In most cases these are review articles or books rather than original sources. References are intended to support specific statements in the text only when these are relatively unfamiliar or at variance with generally held opinions. No attempt is made to indicate the ultimate source of widely known facts.

We wish to express our indebtedness to Dr. Robert A. Cooke, under whom we both received training in this branch of medicine. His opinions and methods form so large a part of the material included in this book that detailed acknowledgment would be impractical.

6 PREFACE

Thanks are also due to the Institute of Allergy of The Roosevelt Hospital for most of the illustrations and to Miss Marcelle Johnson for aid in preparing the manuscript.

WILLIAM B. SHERMAN WALTER R. KESSLER

New York City

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Chapter 1

INTRODUCTION



HISTORICAL BACKGROUND

Ancient and medieval medical writings contain references to individual idiosyncrasies to foods and odors, which, in the light of present knowledge, are recognizable as examples of allergic disease. Jenner, in his account of vaccination for smallpox in 1798, described the accelerated reaction to the virus in persons who had previously been vaccinated, an example of altered reactivity obviously related to previous contact with the causative agent. More definite descriptions of allergic phenomena date from the nineteenth century. Bostock in 1819 described hay fever, from which he himself suffered, under the name of summer catarrh. In a subsequent publication in 1828, he stated that the condition was popularly known as hay fever because of the belief that it resulted from the effluvium of new hay. However, he did not himself accept this explanation, but attributed the symptoms to exposure to the summer sun. Blackley in 1873 clearly showed that the condition was produced by grass pollen, and described the reactions noted when pollen was placed in a scratch in the skin or the conjunctival sac. During the same period, Salter and others also attributed asthma to idiosyncrasy to various extrinsic materials such as animal danders. Further evidence of acquired idiosyncrasy to infective agents was furnished by Koch in his accounts of tuberculin sensitization of animals infected with tubercle bacilli, late in the nineteenth century.

While these observations furnished examples of unusual, individual reactions to foreign materials, correlation and explanation of the phenomena awaited the development of the concept of immunity to infections and toxins acquired through previous contact. Portier and Richet, in studying the immunization of dogs to the toxin of the sea anemone Actinia, were surprised to