

GLASER

• ALLERGY IN CHILDREN

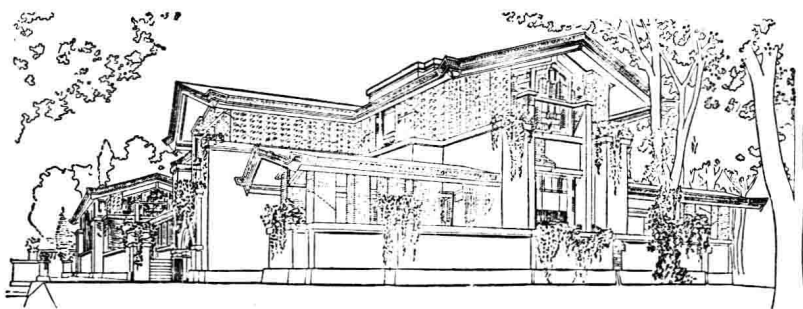


ALLERGY IN CHILDHOOD

By

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INTRODUCTION

IT IS NO LONGER necessary, as it was at one time, to explain why there should be specialists in internal medicine and specialists in pediatrics. These fields have developed so steadily and so extensively that it is not now possible for any one individual to be thoroughly versed in both. However, it is still true that many allergists who are internists, and this includes younger as well as older physicians, feel that there is no such thing, properly speaking, as pediatric allergy, and point with pride to the large number of children in their practices, particularly those who flock in all day Saturday for their injections of pollen or house dust extract or vaccine. However, a close examination of the makeup of such practices, as regards pediatrics, reveals that most of these patients are afflicted with typical pollinosis or typical bronchial asthma. The treatment of this is not essentially different in children, at least beyond the age of two or three years, from adults. In fact, the internist-allergist can generally treat these patients more successfully than their counterparts in adult life because they present fewer complications. Also, at this age, the tendency to spontaneous recovery is greater than in any other period of life. It may, therefore, be desirable to point out some of the essential differences between the nature of the allergy dealt with by the pediatrician and that by the internist.

First of all we have come to realize that the great majority of allergic children can be recognized very early in life. This is the time when the pediatrician, who is skilled in the diagnosis and treatment of diseases in infancy and childhood, can detect the first evidences of allergic disease. He should then take whatever steps may be necessary for its relief or modification. We are, for example, only just beginning to realize the great variety of manifestations of allergy which result from our present-day method of feeding practically all newborn infants. Cow's milk is fed instead of human breast milk or other feedings. Only the pediatrician is in a position to deal with this problem.

Another important duty of the pediatrician is the prophylaxis of allergic disease. No one in the world works harder to eliminate

the difficulties in practice which are the source of his livelihood than does the pediatrician. The pediatrician immunizes his patients routinely against all diseases in which immunization is practical. The pediatric allergist does everything he can to see that the child is raised in an environment and on a diet which inhibits the development of allergic disease. In marked contrast to this is the fact that most of today's adults (except those who were in the service) have never been immunized against tetanus by means of toxoid. Such immunization is of fundamental importance to all individuals and especially those with allergy.

Recent developments in the field of the prophylaxis of allergic disease in the newborn (to be discussed later in this book) are particularly concerned with the feeding of the newborn infant. The technical difficulties involved are such that this should be managed only by a physician who has had a good training in pediatrics and is particularly interested in newborn infants. This phase of pediatric allergy has no counterpart in the practice of the internist-allergist.

Diagnosis of bronchial asthma is much more difficult in infancy and childhood than it is in adult life because of congenital stridor and other congenital anomalies which may produce wheezing simulating asthma. On the other hand, the internist-allergist has a special problem with dyspnea of cardiac origin, certain industrial diseases such as silicosis, neoplastic diseases, and the degenerative diseases of advancing age.

The pediatric allergist is confronted not only with the problem of dosages of various medications in proportion to the weight and age of the child, but also with the paradox that such a patient may, when treated by the injection of allergenic extracts, require a dose many times larger than many an adult who has the same disease. If the allergic child becomes acutely ill the pediatrician has a special problem because of the lower bodily reserves of infancy and childhood.

This material represents the amplification of a series of lectures given in part to the medical students, and more particularly to the pediatric house staff of the Strong Memorial and Genesee Hospitals. It originated when a course in pediatric allergy was established at the University of Rochester School of Medicine and Dentistry in 1931. For the three years previous to this writing, outlines of the

lectures were mimeographed. This became such a difficult and time-consuming task that it was felt advisable to assemble the material and publish it in book form. No attempt has been made to write a complete textbook on allergy, but enough references are included so that the various phases of this subject may be studied in detail by consulting the original literature and standard textbooks of pediatrics, allergy, dermatology, and allied sciences. This book presupposes on the part of its readers a reasonable knowledge of general pediatrics. For those who wish to enter pediatric allergy, it assumes a preliminary knowledge of the subject as may be learned by working in an adult allergy clinic, or an allergy clinic dealing with both adults and children, and staffed by a competent internist-allergist and pediatrician-allergist. For this reason, this text does not go into detail concerning phases of theory and practice of allergy which are essentially the same in adults as in children, except in certain instances where this seemed desirable for the sake of clarity or emphasis.

One of the most interesting facets of pediatric allergy is that it has developed within the span of the life and practice of many men now living, i.e., it is a young specialty. In fact, it is so young that as a specialty it is sadly neglected in many of the medical schools of this country. Some department heads look upon it as scarcely more scientific than witchcraft.

The beginnings of clinical allergy go back to the observations of von Behring on reactions to antitoxin (later termed anaphylactic reactions) first used by him in the treatment of diphtheria. Some years later in 1906, von Pirquet (6) devised the term "allergy" to describe altered states of reactivity, and Schick (7), in 1913, developed the cutaneous test for susceptibility to diphtheria. However, clinical allergy, in the sense in which the word is now understood, really got its start when Schloss (8), in 1912, introduced the cutaneous scratch test with foods as a practical clinical procedure. This was closely followed by the development of the intradermal test by Cooke in 1915, as discussed by Aaron Brown (1), and other fundamental work by Walker (9) starting in 1916. Through the work of these investigators skin testing, as a diagnostic procedure for what are now known as the allergic diseases, was firmly established on a practical basis.

As in the case of the other sub-specialties in pediatrics, the pediatric allergy clinic developed out of the general pediatric clinic. As nearly as can be ascertained, the first pediatric allergy clinic was established under the direction of Dr. Edward Scott O'Keefe at the Massachussets General Hospital in January of 1918. The first publication from this clinic was by Dr. O'Keefe (4) and appeared in November of 1920. Dr. M. Murray Peshkin established a pediatric allergy clinic as part of Dr. William L. Rost's general pediatric clinic at Mt. Sinai Hospital in 1919. This grew so rapidly that in 1926 it became an autonomous unit under the same direction. The date of its first paper (5) was 1922, and in the years which followed, publications by Dr. Peshkin and the physicians trained by him covered almost all phases of allergy in children. So well was this work done that these papers still stand as authoritative documents in their field.

In 1920, Dr. Lewis Webb Hill assumed charge of a pediatric allergy clinic at Children's Hospital in Boston for a brief period of two years, and, in 1929, started a clinic for eczema in children. This led to his publishing a succession of papers which have contributed brilliantly to our knowledge, still pathetically incomplete, of this very difficult subject. During the same period, Edward S. O'Keefe and W. Ray Shannon made important contributions, and Bret Ratner began publishing a series of papers dealing with fundamental theoretical and practical problems in this field. Thus, the specialty of pediatric allergy was born.

With the growth of various boards of specialization, it was natural for a board to be established for the certification of allergists. The first to be so certified were internists who were obliged to hold the certificate of the American Board of Internal Medicine. Dr. Robert A. Cooke, the dean of American allergists, and a man who was more responsible than any other one individual for setting up the high standards required for such certification, announced this at a meeting of the then Society for the Study of Asthma and Allied Conditions at Atlantic City, New Jersey, May 2, 1942. At that time, I had the privilege of bringing up the problem of certification of pediatric allergists (3). Attention was called to the fact that it had been repeatedly pointed out in the meetings of the Society that the great majority of allergic symptoms begin at a time when the

patient is normally under the care of a pediatrician; that the pediatrician is, therefore, logically the allergist of the future, and that, as time went on and interest in pediatric allergy increased, the internists and other specialists might eventually deal mainly with the end products of neglected opportunities in pediatric allergy. Dr. Cooke urged that the pediatricians should bring pressure upon the American Board of Pediatrics to consider certification for the pediatrician allergist similar to that then being granted to internists by the American Board of Internal Medicine. However, the American Board of Pediatrics, for a long time, had very little interest in this, but, in 1945, almost entirely as a result of the efforts of Dr. Bret Ratner, this Board did announce certification in the sub-specialty of pediatric allergy (2). For its Advisory Committee on Allergy it named the same committee as the American Board of Internal Medicine with the addition of Dr. Oscar Schloss, a particularly fitting tribute to the pediatrician who initiated the clinical study of pediatric allergy. It was not, however, until October 1, 1946, that the first group of twelve pediatricians interested in allergy were certified on their records without examination by this board. In the order certified, these were: Dr. Oscar M. Schloss; Dr. Lewis Webb Hill; Dr. William P. Buffum; Dr. Bret Ratner; Dr. Jerome Glaser; Dr. Joseph H. Fries; Dr. John E. Gundy; Dr. Arthur J. Horesh; Dr. Samuel J. Levin; Dr. W. Ambrose McGee; Dr. Benjamin Zohn, and Dr. Orlando L. Ross.

The next step occurred in 1948 when a section on pediatric allergy was organized at the Atlantic City meeting of the American Academy of Pediatrics with Dr. Bert Ratner as its first chairman. Here again, a fitting tribute was paid to a pediatrician who was and is one of the leaders in the development of this specialty and in the teaching of it to others. Meantime, pediatricians were being examined for certification in the sub-specialty of allergy by a group heavily weighted with internists. The incongruity as well as the impracticality of this was soon manifest, and, in 1952, a Sub-Specialty Board of Pediatric Allergy consisting of pediatric allergists was organized by the American Board of Pediatrics. The Chairman was Dr. William P. Buffum of Providence, Rhode Island, a pediatrician distinguished for his work in asthma of early infancy, with an unquestioned reputation for fairness and ability as an organizer. In

addition, few men are so well beloved for their fine personal qualities as is Dr. Buffum by his fellow pediatricians. The following were appointed to assist him: Dr. William C. Deamer; Dr. Jerome Glaser; Dr. James C. Overall; Dr. Bret Ratner, and Dr. Albert V. Stoesser. Under this board the first examinations by pediatric allergists for pediatricians desiring certification in the sub-specialty of allergy were held in various cities under the auspices of monitors just prior to the meeting of the American Academy of Pediatrics in Chicago in October, 1952. With this event, pediatric allergy as a specialty may be said to have come of age, although it still has a struggle ahead to gain the recognition it deserves in academic and other circles.

In conclusion, I should like particularly to express my indebtedness to Dr. Samuel W. Clausen, late Professor of Pediatrics at the University of Rochester School of Medicine and Dentistry through whose cooperation I was able to start a pediatric allergy clinic there in 1931; to Dr. Stearns S. Bullen and Dr. Louis B. Baldwin (now of Phoenix, Arizona) in whose Adult Allergy Clinic I worked for a number of years before and after the Pediatric Allergy Clinic was started; to Dr. Lewis Webb Hill and Dr. Bret Ratner whose round tables and seminars in pediatric allergy under the auspices of American Academy of Pediatrics have done so much to make the subject of allergy interesting to pediatricians and to such internist-allergists as the late Dr. Aaron Brown, and to Drs. Robert A. Cooke, M. Murray Peshkin, George Piness, Milton B. Cohen, and Matthew Walzer who, in various ways, have encouraged and supported my work. I should also like to acknowledge my great obligation to Drs. Marion B. Sulzberger and Rudolf L. Bear for their kindness in helping me with numerous problems which have arisen in the course of studying the various allergic skin diseases in children. Dr. George L. Engel was most helpful in criticizing the chapter on psychosomatics although our points of view do not necessarily coincide.

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With these acknowledgments and the feeling that this work could have been better done by older and wiser men in this field, with all humility I turn this book over to those interested in allergy in children.

JEROME GLASER, M.D.

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CONTENTS

	<i>Page</i>
INTRODUCTION	vii
<i>Chapter</i>	
1. THE INCIDENCE AND PROGRESSION OF ALLERGIC SYNDROMES IN CHILDREN	3
2. GENERAL CHARACTERISTICS OF THE ALLERGIC CHILD	11
Growth and development of the allergic child	11
Intelligence of the allergic child	12
Food dislikes in allergic children	12
Intercurrent infection and allergic disease	14
The thyroid gland and allergy in children	15
Allergy in identical twins	16
3. HISTORY TAKING AND THE PHYSICAL EXAMINATION	19
Physical examination	25
Progress notes	26
4. SKIN TESTING	28
Intradermal testing	35
Passive transfer tests	39
Skin testing in the newborn infant	40
Ophthalmic testing	41
5. RECAPITULATION	44
6. ALLERGY IN EARLY LIFE	48
Pathological physiology of allergic disease	48
Intrauterine sensitization	49
Fetal hiccoughs	51
Urticaria	51
Erythema neonatorum	52
7. GASTROINTESTINAL ALLERGY	55
Abdominal pain as a minor symptom	56
Abdominal pain of a subacute, recurrent nature	57
Severe abdominal pain simulating a surgical condition ..	57
Roentgenographical evidence of gastrointestinal allergy ..	57
8. COLIC	60
9. PYLOROSPASM AND HYPERTROPHIC PYLORIC STENOSIS	67
10. CHRONIC ULCERATIVE COLITIS	70

11.	THE CELIAC SYNDROME	78
12.	GASTROINTESTINAL ALLERGY— <i>Continued</i>	82
	Cyclic vomiting	82
	Geographical tongue	83
	Other gastrointestinal allergic disorders	84
	Regional enteritis	87
13.	THE ECZEMATOID DERMATOSES	90
	The eczematoid dermatoses of infancy childhood	91
14.	ATOPIC DERMATITIS	93
	General characteristics of the child with atopic dermatitis	93
15.	ATOPIC DERMATITIS— <i>Continued</i>	97
	Chronic atopic dermatitis	98
	Atopic erythroderma	101
	Atopic dermatitis by contact	103
16.	IMPORTANCE OF INHALANT ALLERGENS IN ATOPIC DERMATITIS	105
17.	THE TREATMENT OF ATOPIC DERMATITIS	108
	General measures in the symptomatic treatment of atopic dermatitis	108
	Treatment of local infection	109
	The "use test"	110
	Bathing	111
	Tar baths	111
	Soap substitutes	112
18.	LOCAL TREATMENT OF ATOPIC DERMATITIS	114
	Wet dressings	115
	Application of wet dressings	115
	Subacute and chronic atopic dermatitis	117
	Tar	117
	White tars	119
	Lassar's paste	120
19.	THE TREATMENT OF ATOPIC DERMATITIS WITH CORTICOTROPIN (ACTH) AND CORTISONE	124
20.	COMPLICATIONS OF ATOPIC DERMATITIS	127
	Impetigo	127
	Eczema vaccinatum	128
	Eczema herpeticum—Kaposi's varicelliform eruption ..	129

Other infections complicating eczema	131
Miscellaneous complications of atopic dermatitis	133
Respiratory and gastrointestinal	133
Renal disease	133
Pyrexia	134
Phenylpyruvic oligophrenia	134
21. SUDDEN DEATH IN ATOPIC DERMATITIS	137
22. HOSPITAL MORBIDITY AND MORTALITY OF ATOPIC DERMATITIS	139
23. SEBORRHEIC DERMATITIS	143
Differential diagnosis	144
Treatment of seborrheic dermatitis	150
24. ERYTHRODERMIA DESQUAMATIVA	154
25. CONTACT DERMATITIS	157
Technic of patch testing	157
Treatment of contact dermatitis	161
Poison ivy (<i>Rhus toxicodendron</i>) dermatitis	162
26. ECZEMATOID DERMATOSES OF BACTERIAL ORIGIN	165
Infectious eczematoid dermatitis	166
27. NUMMULAR ECZEMA—CIRCUMSCRIBED NEURODERMATITIS	169
Nummular eczema	169
Circumscribed neurodermatitis	171
28. BRONCHIAL ASTHMA IN INFANTS AND CHILDREN	174
Latent wheezing	178
Fever in childhood asthma	179
Early appearance of emphysema in infantile asthma	179
Symptomatological differences between infantile and adult asthma	180
Other diagnostic aids	180
Response of the asthmatic attack to medication	180
Nasal eosinophilia	181
29. THE DIFFERENTIAL DIAGNOSIS OF BRONCHIAL ASTHMA ...	183
Congenital laryngeal stridor	183
30. THE DIFFERENTIAL DIAGNOSIS OF BRONCHIAL ASTHMA—	
<i>Continued</i>	188
Asthmatic bronchitis	188
Foreign body in a bronchus	190

	Foreign body in the esophagus	191
31.	THE DIFFERENTIAL DIAGNOSIS OF BRONCHIAL ASTHMA—	
	<i>Continued</i>	195
	The azygos vein and fissure	195
	Generalized obstructive emphysema of infancy (brochio-	
	litis or capillary bronchitis)	202
	Fibrocystic disease of the pancreas (mucoviscidosis)	204
	Dust bronchitis	205
	Congenital lobar emphysema	206
32.	THE DIFFERENTIAL DIAGNOSIS OF BRONCHIAL ASTHMA—	
	<i>Continued</i>	209
	Thymic asthma	209
	Miscellaneous conditions	211
33.	THE DIFFERENTIAL DIAGNOSIS OF BRONCHIAL ASTHMA—	
	<i>Continued</i>	213
	Cardiac asthma	213
	Congenital heart disease	214
	Sighing dyspnea	214
	Post-encephalitic hyperpnea	215
	Ayerza's disease	216
	Bronchotetany	217
	The allergic cough	218
34.	COMPLICATIONS OF BRONCHIAL ASTHMA	221
	Emphysema	221
	Atelectasis and massive collapse of the lungs	221
	Air in the extrapulmonary spaces	223
	Heart disease and asthma	224
	Tuberculosis and asthma	225
	Spontaneous fracture of the ribs	225
	Death from asthma	226
35.	THE RELATIONSHIP OF THE TONSILS AND ADENOIDS TO	
	BRONCHIAL ASTHMA	228
	Recurrent lymphadenoid tissue in the nasopharynx	229
36.	SYMPTOMATIC TREATMENT OF BRONCHIAL ASTHMA	233
	Routine management of asthmatic attacks following acute	
	upper respiratory infections	237

Bed rest	237
Cough mixtures	238
Nose drops	239
Steam inhalations	242
Oral administration of ephedrine	243
Aminophylline suppositories	243
Inhalation of epinephrine aerosol 1/100	244
Epinephrine 1/1000 by hypodermic injection	245
37. STATUS ASTHMATICUS	249
Aminophylline	250
Other medications in status asthmaticus	252
ACTH and cortisone in status asthmaticus	253
Intramuscular administration of ACTH	255
Oxygen in status asthmaticus	256
Bronchoscopy in status asthmaticus	256
Miscellaneous procedures in status asthmaticus	256
Epinephrine poisoning	257
38. MANAGEMENT OF THE CHILD WITH CHRONIC ASTHMA	260
Environmental control	260
Education	262
Physiotherapy in bronchial asthma	263
Conclusion	264
39. THE TREATMENT OF ALLERGIC DISEASES WITH CORTICO- TROPIN (ACTH) AND CORTISONE	266
Indications for hormone therapy	267
General procedures	268
Choice of drug to be used	268
Adverse reactions to ACTH and cortisone	271
Potassium in relationship to ACTH and cortisone therapy	272
Eosinophilia in pediatrics	274
The eosinophil depression test	275
40. CORTICOTROPIN (ACTH) AND CORTISONE IN PREGNANCY ..	278
41. POLLINOSIS (SEASONAL ALLERGIC RHINITIS; TREE POLLINO- SIS; ROSE FEVER; HAY FEVER)	280
Symptomatology	281
Indications for specific treatment	282
Masked pollinosis	283

	Skin testing with pollen extracts	284
	Treatment by the injection of pollen extracts	285
	The symptomatic treatment of pollinosis	290
42.	LESS COMMON DISEASES DUE TO POLLEN	295
	Vulvo-vaginal pruritis	295
	Dermatitis due to pollen	296
	Urticaria due to pollen	296
	Miscellaneous conditions due to pollen	297
43.	RECURRENT UPPER RESPIRATORY DISORDERS OF ALLERGIC ORIGIN AND PERENNIAL ALLERGIC RHINITIS	299
44.	VARIOUS FORMS OF URTICARIA, ANGIOEDEMA, ERYTHEMA MULTIFORME AND ERYTHEMA NODOSUM	311
	Urticaria and angioedema	311
	Treatment of urticaria	313
	Papular urticaria (lichen urticaria papuloso)	314
	Urticaria factitia	315
	Urticaria pigmentosa	316
	Erythema multiforme	317
	Erythema nodosum	318
45.	ALLERGY TO DRUGS	321
	Penicillin	325
	Technic (Matheson)	327
	Significance of the Skin Test	327
	Insulin	329
46.	ALLERGY TO VACCINES	330
	Death following vaccine injections	330
	Reactions following antirabies prophylaxis	333
47.	THE ANTIHISTAMINES	335
	Dosage of the Antihistamine Drugs	335
	Toxic Reactions to the Antihistamines	336
	Treatment of antihistamine intoxication in childhood	337
48.	PREVENTION OF ALLERGIC REACTIONS TO DRUGS	339
	Local anesthetics	340
49.	ANAPHYLACTOID PURPURA (Schönlein-Henoch Syndrome) ..	342
	Treatment of the Schönlein-Henoch Syndrome	348