Allergy and Diseases of the Central Nervous System

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Introduction

The term "allergy" has recently been used very extensively to describe and to provide reason for the occurrence of mental symptoms and overt psychiatric disease following the exposure to certain substances, such as by the ingestion of certain foods. Examples of such foods are milk protein, cereal products, refined carbohydrates, food additives, etc.

While the relationship of such symptomatology and disease to these exposures is not questioned, the purpose of this presentation is to indicate that some other responsible process or cellular reaction, other than an intracerebral allergic reaction, may be responsible for these changes. Utilizing my experience in the treatment of "so-called allergic asthma," which, in my appreciation, arises largely for reason of chronic deficiency, the purpose of this presentation, therefore, will be to question the logic of the use of the term "allergy" in reference to much that is considered as allergic asthma, and in reference to the mental symptoms and overt psychiatric disease currently being attributed to "cerebral allergy."

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Allergy Defined

There is no general agreement as to the definition of allergy. It is generally conceded, however, that the allergic reaction is an intracellular reaction due to the combination of antigen with antibody, which gives rise to the disruption of cellular enzymatic processes concerned with protein metabolism. This leads to the production of proteolytic toxins which, in turn, cause the release by the cell of histamine and the other chemical mediators such as serotonin, plasma Kinins, etc. It is these chemical mediators which are responsible for the vasodilation, extravasation of plasma from capillaries, exudation of mucous and muscle spasm, etc. Cellular infiltration into the area follows if the tissue damage is severe.

Deficiency Reactions in the Allergic State

Though my clinical interest over the past 20 years has been largely in the recognition of chronic asthma and chronic rhinitis as chronic A and D vitamin-deficiency diseases, and in their therapy with megadoses of these vitamins, in this period of time I have observed and recorded the association, with chronic asthma, of many clinical findings which do not arise for reason of the allergic reaction and which instead

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are the result of the influence of the same chronic deficiency state on other tissues. Principal among these tissues so involved are skeletal muscle and smooth muscle other than that of the bronchial tubes, such as of the intestinal tract.

Among these clinical findings are functional complaints of central nervous system activity which I defined as "biochemical anxiety," symptoms due to spasm of other smooth musclelined tubes or conduits and physical findings of increased tendon reflexes and of increased irritability of skeletal muscle.

These findings have been amalgamated into what I have defined as the "A and D deficiency maladaptive synd-drome." In the deficient nondiseased person, this syndrome is recognized as the disease-prone state in reference to chronic asthma and to other of the "spastic conduit diseases." For example, this disease-prone state not only is frequently recognized in the nondiseased siblings of an asthmatic child, born of the same deficient mother, but is also very frequently recognized in the deficient mother of these children. By this, I infer that the siblings and mother of an asthmatic child, who is considered "allergic," usually show the clinical stigma of the same deficient state that may be largely responsible for the bronchial spasm in the asthmatic child.

Examples of members of this genus of diseases, the genesis of which may be largely dependent on an element of smooth muscle spasm, are constipation, colitis, migraine, essential hypertension and coronary atherosclerosis, dysmenorrhea, etc.

An Other-Than-Allergic Reaction in Asthma

The frequently successful vitamin treatment of deficient asthmatic patients, who have negative skin tests, also suggests that the process entirely responsible for the bronchial spasm in some cases of asthma and the process partially responsible for the bronchial spasm in others is due to chronic deficiency rather than due to allergy.

The purpose of this presentation, however, is not to detail the A and D vitamin-deficiency syndrome or to detail the genus of spastic conduit diseases, but only to describe as much of this syndrome and of this genus that will be appropriate to my consideration of "cerebral allergy."

Cerebral Allergy or Cerebral Deficiency

The above-mentioned clinical evidence, indicating the direct association of non-allergic symptomatology and physical findings and the indirect association of overt non-allergic disease states with chronic asthma, and also the response of chronic asthma to vitamin therapy, suggests that in many cases this pulmonary disease does arise largely for reason of chronic deficiency.

The study of what I have defined as "biochemical anxiety," including its response to A and D vitamin therapy, and the lack of evidence that the classical allergic reaction does occur in cerebral allergy, suggests that the responsible intracerebral reaction may instead also arise largely for reason of chronic deficiency.

Possibly the most important evidence that a reaction other than the allergic reaction is present in psychiatric disease is the absence of any reports of cerebral spinal fluid changes in these cases.

Terminology

I hope I have therefore made it obvious that for some years the term "allergy" inadequately and incorrectly defined the clinical facts that have concerned me in my study of chronic asthma and that recently this concern has been projected to involve developments in the field of Orthomolecular psychiatry.

For a period of time, I used the term "deficiency reaction" to define the observations I was making but never found it completely adequate. As I strove for other definitions, I found it necessary to define the intracellular defect common to all Orthomolecular disease and then to qualify it according to various etiologies.

The generic term chosen to define all diseaseprovoking intracellular reactions was "biopathic," "bio" referring to biochemical and "pathic" to an abnormal or pathological state.

This term may be prefixed according to etiology by the adjective "deficiency," "toxic," "allergic," etc., or by a combination of these terms. **Discussion**

Thus, while I do agree that a percentage of chronic asthma is caused by an "allergic-biopathic" reaction, arising for reason of the antigen-antibody combination, the greatest proportion of this disease is caused by a "deficiency biopathic" reaction.

In reference to what currently is defined as "cerebral allergy," it is my calculated guess that it is the result of chronic deficiency plus the addition of a toxic substance which arouses hypersensitivity but not allergy in the central nervous system.

Conclusion

In conclusion, therefore, the observations I have made in the study of chronic asthma and more recently in the field of Orthomolecular psychiatry have compelled me to define the common denominator intracellular reaction in all Orthomolecular disease states as "biopathic" and to suggest that the intracellular process responsible for what is now described as "cerebral allergy" is instead a combined "deficiency and toxic biopathic reaction."

TABLE 1

A and D Vitamin Therapy of Chronic Asthma Degree of Resolution (Subjective and Objective)

| Age Cases | | Number of | Moderate to Excellent | Slight to Nil |
|-------------------|-------------------|---------------|--------------------------|------------------|
| Chronic Asthma | Below 20 Years | 5,000 Approx. | 93% - Approx. | 7%-Approx. |
| Above 20 Years | | 5,000 Approx. | 67%-Approx. | 23%-Approx. |

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TABLE 2 The Vitamin A and D Deficiency Maladaptive State

| | Functional | Constipation | | |
|-----------------------|--------------------------------------|--|--|--|
| | Complaints | Trapezius Tension | | |
| High Frequency | Postural Dizziness Nocturnal Calf | Physical Findings | | |
| Moderate Frequency | Cramps Fatigue Headache Anxiety | Patellar Tendon Hyperreflexia Tenderness Soleus and Trapezius Myoedemic "Pig" of Forearm | | |
| | Plugged Nares Bloating | Coated Tongue Breaking, Splitting, Layering of Fingernails | | |

TABLE 3

Spastic Conduit Diseases

| Type | Effected by Conduit | Disease |
|-----------------|---------------------|------------------------------|
| | Spasm of | |
| Compensatory | Bronchial Tube | Asthma |
| or | Stomach | Spasm and Ulcer |
| Adaptive | Duodenum | Spasm and Ulcer |
| | Ileum | Ileitis |
| | Colon | Constipation and/or Diarrhea |
| | | Colitis |
| | Arterioles | Essential Hypertension |
| | Coronary Artery | Coronary Arteriosclerosis |
| Noncompensatory | Cerebral Vessels | Migraine |
| | Bladder | Enuresis |
| | Uterine Corpus | Dysmenorrhea |
| | and Cervix | Endometriosis |

ALLERGY AND CNS DISEASES

TABLE 4

Vitamins A and D and Mineral Therapy of Deficiency Disease

| | | Child 5 Years (Daily) | | Adult (Daily) | |
|-----------------------------|------------|-----------------------|--------------|---------------|--|
| Initial | | Maintenance | Initial | Maintenance | |
| Vit. D ₂ plus D3 | 1.600I.U. | 900I.U. | 5,0001,U. | 2,0001.U. | |
| Vit. A | 10,0001.U. | 6,000 LU. | 60,0001.U. | 25,0001.U | |
| 1/2 Gram | 1 Tab | | 3-6 Tabs | 0-3 Tabs | |
| Bone Meal Calcium | 150 mg | Nil | 450 - 900 mg | Nil to 450 mg | |

VITAMINS USED

The main product used is Aauasol A and D 50 cc, by Arlington Labs of Montreal.

This product used is Aduasof A and D 30 cc, by Armigion Labs of Montreal.

This product may be obtained from retail pharmacists in Canada.

The children's dosages of 3 to 5 drops B.l.D. to T.l.D. are given alone or combined with 1 or 2 cod liver oil capsules, 100 LU. vitamin D₂ plus D3, and 1,250 IU A each. For convenience, maintenance therapy may be of the capsules only.

In adults, dosages of the drops are 6 to 7 drops T.l.D. Three to 6 cod or halibut liver oil capsules are usually given in addition and in most cases, for convenience, are used in maintenance. The drops, however, may be used for maintenance.