

## ALLERGENS AS A CAUSE OF DISEASE

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One of the new concepts in the causation of disease is represented by the discovery of ALLERGENS. An ALLERGEN by definition is an agent, exogenous or endogenous in origin, capable of inciting an ALLERGY. An allergy "connotes an altered reaction of the tissues in certain individuals on exposure to agents which, in similar amounts are innocuous to other persons." (Merck's Manual, Tenth Edition). The immature state of the knowledge in this field is emphasized by the fact that Merck's Manual fails in its discussion to take into account the possibility of an ENDOGENOUS or AUTOGENOUS allergen. It assumes that all allergens are of extrinsic sources.

Harry Beckman, in his latest book "Pharmacology in Clinical Practice" (Saunders, 1952) makes the same mistake. He says, "Susceptible individuals, sensitized by foreign substances (allergens), develop specific antibodies (reagins) against them and store them in their tissues. When they are assailed later by these allergens, there occurs an allergen-reagin reaction in which histamine is released." Histamine, of course, is the agent that then creates most of the symptoms of allergy. The existence of the ENDOGENOUS ALLERGEN is now becoming an item of scientific recognition, though suspected and hypothesized for almost fifty years.

Pressman reported in 1951 the existence of anti-lung and anti-kidney antibody (1) (Journal of Allergy, 22:387 Sept. 1951) and that they were immunologically similar and could be a cause of glomerular nephritis. Such allergens have also been called AUTOANTIBODIES and NATURAL TISSUE ANTIBODIES in the literature. In his article Pressman listed also multiple sclerosis, rheumatic heart disease, periarteritis nodosa and lupus erythematosus as said to be in this category. In pernicious anemia too, antibodies to red cell proteins are known to exist.

Jahiel and Jahiel reported in the Journal of Allergy 21:102, 1950, that "These experiments suggest that the partial hydrolysis of autogenous proteins, tissue destruction and liberation of endocellular material, and reabsorption of an excretory product can, under certain conditions, give rise to autogenous allergens and provoke pathological changes in a previously sensitized tissue." Here we have the most important physiological discovery in a century laid down in this unassuming statement.

Suppose the primary lesion is the necrotic area in a beri-beri heart that often follows a "coronary attack." (The leading cause of death in the United States.) The anti-heart antibody created by the released heart allergens due to the special state of affairs (a necrotic island in the heart) may kill the patient who otherwise would survive the blow. These anti-heart antibodies become a constant inhibitory influence that blocks normal repair processes, blocks normal function to such an extent that the oral administration of a few milligrams of the heart allergen may show a change for the better in the heart performance in ten minutes, if recorded on a phonocardiographic tape. The change being a renewed muscular vigor exhibited by a reduced contracting time.

Atherosclerosis too, is now suspected to be in this category of antibody induced disease. (Science News Letter, April 25, 1959) Drs. Y.S. Lewis and D. E. Smith, of Argonne National Laboratory, reported the destruction of mast cells and consequent development of atherosclerosis by injections of mast cell antibody, in test animals. The various degenerative diseases thought to be due to antibody excess are all those in which no reasonable etiological cause has otherwise been found.

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Normally a healthy endocrine system protects us from these eventualities, but as Sir Robert McCarrison demonstrated in 1918, the first effect of refined foods is to destroy the function of our endocrine glands, with the thymus, adrenal and pituitary among the first to be damaged.

Another definite aggravating feature of malnutrition and endocrine failure is a crippling of the normal acid alkaline balances of the body fluids. Alkalosis aggravates all allergies, a blood pH of 7.3 to 7.4 is normal. Often it is found in allergic victims as high as 7.7. Correcting this with ammonium chloride and calcium chloride often and almost always does relieve the symptoms within hours. (Two grains of each in a glass of water every meal time.) The saliva seems to accurately reflect the blood alkalinity and affords a simple means for testing which the patient himself can follow. Sea water is effective in this correction of alkalinity by reason of its content of calcium chloride and sulfate. Most of the "miracles" produced by sea water are due to this correction of alkalosis, we are sure.

It is very probable that the specialists who deal in allergies are too busy looking at the forest to see the trees. They go to great lengths to determine the specific allergens, provide small doses of the offending substances to reduce the patient's sensitivity, while the blood pH is so high that no appreciable results are possible. The real problem that created the hypersensitivity - the hyperalkalinity - is entirely overlooked. We wish to note here that the minute-dose principle of homeopathic medicine is very well justified by the experience of allergy specialists. Then too, another homeopathic principle is re-established, the much ridiculed hypothesis that to cure a symptom, use the drug that creates identical symptoms, but in smaller dosage. AND DETERMINE THE DEGREE OF DOSAGE ATTENUATION BY TEST ON THE PATIENT. Homeopathic doctors had reported dosages of one part in ten trillion to produce specific reactions, and have been severely ridiculed for their acceptance of the efficacy of such dilutions. Now, Dr. Irving Langmuir of General Electric has shown that such dilutions were the only ones effective - of silver iodide - in causing rain drop formation in the science of rain-making, and that if more than the effective dilution were used - one milligram to the cubic mile of air - the effect WAS REVERSED, and a drouth was secured instead of rain. (TIME magazine, page 93, June 12, 1950.) Sometimes facts are harder to believe than fiction. It is unfortunate when people must suffer from preventable and curable disease just because other more healthy persons refuse to consider the evidence.

Probably the biggest thing to show above the horizon just now in the biological field is this discovery that all biological growth, mammalian at least, is controlled from conception to death by the physiological influence of ALLERGENS, also known as Mycrozoma (Bechamp), Evocator (Needham), Cytost (Turck), Necrosin (Menken), Biophore (Drennan), Proteinogen (Northrup), Protogene (Beadle), Id and Idant (Weismann), Allelocatalyst (Robertson), X-Substance (Mast & Pace), Protomorphogen (Lee & Hanson). (See PROTOMORPHOLOGY, Lee & Hanson, Lee Foundation, for a complete review of the subject.)

A point arises here that deserves careful consideration. Syphilis was once known as "The Great Imitator" for its effects on various tissues of the body simulated almost every known disease, at times. Now, Dr. Sulzberger in the Journal of Allergy of March 1950, page 94, tells us:

"It is therefore correct to say that today the great imitator syphilis has been to a large degree supplanted by the greater imitator 'drug reaction'.

The far-reaching practical implications of this fact were once expressed to me clearly when I visited Dr. L. Diones, the pathologist of the Massachusetts General Hospital, when he said, 'If, as you state, the manifes-

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tations of drug reactions can so closely mimic those of other diseases, then a good physician, when baffled by a disease of obscure genesis, should not so often say, 'Take this medicine,' but more often say, 'Now, stop taking that medicine.'...."

"It is important for my thesis here to note that dermatologic studies have shown that certain drugs are much more likely than others to produce allergic disease, and possess what Rostenberg, Jr., and the speaker have called a high 'sensitizing potential.' Phenolphthalein, arsphenamine, and salicylates are common causes of allergic reactions; other drugs, for example, cascara sagrada, probably self-administered by just as great a number of people, are nevertheless essentially negligible as elicitors of allergies. Moreover, particular drugs and chemicals are inclined to produce their own particular forms of allergic disease, and other allergenic chemicals, other forms; e.g., salicylates tend to produce urticaria and angioneurotic edema; sulfonamides, scarlatiniform, morbilliform, or nodose eruptions; mercury and quinine, eczematous reactions; arsphenamines, exfoliating dermatitis; antipyrine and phenolphthalein, their characteristic fixed polychromatic plaques; and penicillin, either generalized urticaria or dysidrosis-like or 'phytid-like' manifestation of the hands and dermatophytosis-like eruptions of feet and groins.

The reasons why some substances are highly allergenic, and others scarcely so or perhaps not at all, still almost completely escape us. Above all, we remain almost entirely ignorant of the why and wherefore of the tendency of a particular substance to produce its particular type of allergic disease. These are fertile fields, and most challenging ones for study. The great unifying concept of allergy provides the hope that by discovering some of the reasons for the relative sensitizing potentials and the selective proclivities of particular inanimate chemical agents to produce particular forms of disease, one may disclose certain of the most fundamental reasons for the predisposition, resistance, and characteristic responses to many infections."

Here, we may remark, that this imitation of so many diseases by syphilis as well as by ill-chosen drugs is due to a COMMON CAUSE - THE RELEASE BY THE SYPHILITIC ORGANISM OR BY THE DRUG OF THE LOCAL TISSUE ALLERGEN THAT IS BEING ATTACKED - in the case of the drug, by the doctor's prescription aimed at the target lesion; in the case of the syphilis organism, the natural effect of the infective agent on a weakened (by malnutrition) victim. The syphilis organism causes anemia - by releasing red cell antigen through the effect of its enzymes. It, no doubt, can cause paresis or locomotor ataxia the same way.

If the drug were administered in properly chosen HOMEOPATHIC DOSAGE, it, no doubt, would have been successful. IT IS CORRECT TO ACCOMPLISH THE CURE OF AN ALLERGY BY THE PROPER DOSAGE OF THE SAME ALLERGEN THAT CAUSES IT (so say all allergists), but if MORE than this is administered or RELEASED BY A DRUG, the condition will be AGGRAVATED. Parenterally injected drugs are far more dangerous in this connection; in fact, it is, we are sure, relatively difficult to aggravate an allergic state with orally administered allergens. We have very efficient defenses against oral overdoses of such factors, otherwise the food allergies would be far more often fatal.

And we normally depend upon the regular intake of bacterial antigens in our drinking water (termed PYROGENS by the hypodermist) which help guard us against commonly present infectious diseases. These must be carefully removed from water used to

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carry parenteral medication, or severe fevers result from the smallest amount injected. (To the immunized individual - he is allergic to the germ that supplied the allergen IF IT IS PUT INTO HIS BLOOD STREAM.) He is immune to that same germ, if it arrives in his food, by reason of his sensitization.

Excerpted from "Immunity and Hypersensitivity as Factors in the Etiology of Mesenchymal Diseases", by Peterson and Good. P. 422, Postgraduate Medicine, Special Issue, May 1962:

"Hypersensitivity associated with the production of cross-reacting antibodies may be the basis for many diseases. So-called auto-immune diseases, characterized by the presence of antibodies against the patient's own tissues, may involve cross-reacting antibodies in some instances. For example, in lupus erythematosus the antibodies directed against the host cell nuclei may have been elicited by an exogenous antigen rather than the host's cell nuclei.

#### Auto-Antibodies to Isolated Antigens.

There are tissues in the body which are essentially isolated from immunologically competent cells under normal conditions. If such tissues are exposed by trauma or disease, antibodies against them may be produced. Such antibodies may merely reflect this unusual exposure and may have no other significance, or they may result in damage to the tissue.

Sympathetic ophthalmia is a disease which seems to illustrate this type of auto-antibody (12). A penetrating injury to one eye exposes tissue previously well isolated from the rest of the body. Such tissue is not recognized as "self" by the antibody-producing cells, but rather is considered foreign material. Antibodies and hypersensitivity are therefore produced which in turn may damage the other eye. Such a situation may also obtain where other auto-antibodies are found; e.g., antibodies against the heart following a myocardial infarction or after cardiectomy (13), antibodies against thyroglobulin following thyroid infection or surgery, and antibodies against the pancreas in patients with cystic fibrosis of the pancreas or chronic pancreatitis (14). There are many similar examples.

In experimental animals, central nervous system disease or peripheral neuritis simulating postinfectious leuko-encephalitis or Guillain-Barre syndrome may be produced by injecting brain or peripheral nerve tissue along with immunologic adjuvants at a parenteral site (15, 16). In these latter instances, the role of the antibody in causing the disease is seriously questioned; whether or not antibody perpetuates disease is even more difficult to answer. It has been suggested that cellular immunity, rather than circulating antibody, is responsible for some of these diseases (17).

#### Auto-Antibodies Resulting From Altered Antigenicity of Host Tissues.

Although the body generally will not make antibodies against its own tissues, it appears that slight modification of the antigenic character of tissue may cause it to appear foreign to the immune system and thus a fair target for antibody production. Schwentger and Comptoir (18) proposed that the streptococcal toxin causes damage to renal tissue and consequent release into the general circulation of a protein which acts as a foreign protein, thereby stimulating production of an antibody to kidney protein. Circulating anti-kidney antibodies have been related to

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both clinical and experimental renal disease; they are present in the serum of patients with various renal diseases (19) and have been shown to result in experimental renal disease (20). Whether or not such a mechanism causes human renal disease is unknown, but the immunologic implications of existing data are strong.

Infections in the colon may alter the gastrointestinal mucosa sufficiently to induce formation of the anticolon antibodies found in patients with ulcerative colitis (21).

From these considerations, it seems entirely possible that certain human diseases have as their basis an immunologic reaction to host tissues made antigenic by infectious processes."

We are here discussing the infinite complications we get into, if we follow the ramifications of disease that is all so easy to avoid, if we refuse to eat the counterfeit foods that we are offered in every food market today. And then to remedy the ravages of such malnutrition, use ill advised drugs and poisons in huge dosages, often injected directly into our long-suffering blood stream by doctors, whose patients "would be healthier, if drugs had never been discovered"; and "If all medicines were thrown into the sea, it would be all the better for mankind, but all the worse for the fishes." (Oliver Wendell Holmes)

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