

Editorial

THE DEFINITION OF ALLERGY

"Allergy affects ten per cent of the population." "The teaching of allergy in our medical schools is not what it should be," so that "practitioners know little about allergy."

At the recent meeting of the American Academy of Allergy, Dr. J. War-rick Thomas, President of the American College of Allergy, gave an excellent discussion of these statements. At the same meeting, Dr. William B. Castle discussed some of the reactions which occur in the blood dyscrasias, and Dr. Chester S. Keefer discussed reactions from drugs. All of these reactions depend upon antibodies, and so can be correlated with "allergy."

How big is the field of allergy? What is meant by the statements about incidence? What is "minor allergy"—and what is "major allergy"? Hay fever, asthma, and eczema are the typical manifestations that occur in the "allergic individual." Shall we say that 10 per cent of the people are "allergic individuals"? If a person has a severe reaction to penicillin, does that mean that he is an "allergic individual"? In the old days when horse serum was given in large doses intravenously, almost all of the recipients developed serum disease. Does that mean that they were "allergic individuals"? We walk in the country and are stung by a bee or a hornet, and every one of us reacts to some extent. What right have we to draw a line between those who develop a redness and swelling about the size of a 25¢ piece and those others who suffer collapse and shock? Are there not all gradations in the severity of the reaction? When an animal or a man is injected intravenously with a foreign protein, or perhaps with a sulfa drug, he may develop changes in his blood vessels, and the diagnosis of periarteritis nodosa is made. Is such a person allergic?

Quite obviously, it is not possible to separate the reactions of allergy from similar reactions which may occur in normal persons. The symptoms depend upon the development of antibodies, sometimes in the circulating blood and sometimes attached to cells. The antigen meets the antibody in situ and reacts with it. The theory is that a toxic substance—histamine, or acetylcholine, perhaps—is produced, and this causes the local disturbance. Just why and when the development of antibodies should vary so much in different individuals are open questions. Susceptibility to disease—to frequent colds, to the viruses of measles, mumps, and polio, as well as to bacterial infections like scarlet fever and pneumonia—must be correlated with the development of hypersensitiveness. The mechanism of the Arthus reaction and of the Schwartzman phenomenon must be correlated also. The field is large. What we study in allergy is the reaction of the body to noxious agents of all sorts and in wide variety.

How shall we teach such a subject to young students? Is it not important that the effect of antibodies which are attached to cells and which give rise to reactions which we call "allergic" should be compared with the effect of other antibodies which are circulating in the blood stream? The "allergist" does, of course, need special knowledge about pollens, about molds, about cottonseed and kapok, about the importance of cats and dogs in the home, even about "house dust." He must learn about certain special tricks in history taking. He must be made aware of the dangers involved in trying to desensitize a patient. He must learn about the degrees of tolerance. On the whole, however, there are only a few of these special points, and they can be taught without too much difficulty in the Departments of Medicine, provided only that the instructor will appreciate their importance from both the theoretical and the practical aspects.

Meantime, the statement that allergy affects 10 per cent of the population should be explained. Does it apply only to "allergic individuals"—or does it include all of those who may sneeze, wheeze, or itch from causes which are sometimes defined quite easily and other times defined not at all?

—*F. M. Rackemann.*