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The Prausnitz Experiment

A Correction and an Appreciation

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In his review $\frac{3}{8}$ of the literature of "The Passive Transfer of Allergy", referring to his classical experiment with the serum of his fish-sensitive assistant Kuestner, in the first convincing demonstration in human beings of the antibody-antigen theory of v. Pirquet and Schick, Carl Prausnitz has most generously included an erroneous statement, which must not be permitted to remain uncorrected.

He writes "The reaction had been discovered independently by Coca . . .".

The facts are as follows.

Shortly after the appearance of his report, in 1921, Dr. Prausnitz

* Prausnitz, Carl: Int. Arch. Allergy 6, 260-269, 1955.

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wrote me, asking what I thought of his experiments. Having no experience with his technic, but only an excited interest in the experiment and a large conveniently accessible clinical material, I enlisted the competent technical skill of Ella F. Grove in the exploration of the Prausnitz phenomenon. I did not even trust myself to answer his letter, preferring to wait till our finished study should justify an opinion.

At that time I was preoccupied with a consideration of the significant differences between the thoroughly characterized anaphylactic sensitivity of lower animals and the spontaneous, familial and other allergic conditions of man; and the Prausnitz phenomenon as soon as we had confirmed it, seemed to provide another experimental criterion of differentiation of the two categories of specific sensitivity.

Hence our particular interest in differentiating the properties of the allergic antibodies which are revealed by the Prausnitz experiment, and those of the neutralizing antibodies which are elicited by immunizing injections.

One phase of the Prausnitz experiment has not received the particular public attention which it undoubtedly deserves and which I noticed with especial interest. Having demonstrated the specific property of passive sensitization for heated fish extract in Kuestner's serum, Prausnitz naturally used the several current technics suitable for the detection of corresponding immune antibodies (precipitation, passive sensitization of the guinea-pig and, if I am not mistaken, complement fixation). The results of these tests were negative, but fortunately they did not shake the confidence of that investigator in the positive significance of the passive transfers to the human skin.

In these negative tests the way was prepared for the assumption of a different kind of antibody in human allergy, an assumption which was perhaps inhibited by the failure of the passive sensitization of Kuestner's probably "unreceptive" skin with Prausnitz's pollen-sensitive serum. May I suggest that one of the most useful products of the studies with the Prausnitz technic consists in the lesson that many of the problems of human allergic disease must be studied in the affected human subject rather than in the anaphylactic lower animal.