

sensitive patients on being given epinephrin react with tremor, sense of cold, rigor, glycosuria and rise in blood pressure.

An analysis of the various pharmacodynamic reactions observed in twenty-one cases in this way will be found in our published paper. In six patients who exhibited marked sensitiveness to pilocarpin, the vagotonia varied somewhat in different domains, though, usually, the vagotonic signs were most marked in that portion of the autonomic domain to which belonged the clinical symptom which had first attracted our attention. Thus, for example, in a patient suffering from bronchial asthma, certain other symptoms in the hind-brain domain were conspicuous. In epinephrin-sensitive cases, also, there was no sure way of prophesying in what domains the sympathicotonic signs would be most conspicuous.

We also studied the correlation between clinical symptoms and pharmacodynamic autonomic reactions in another way. Taking the cases which clinically showed various vagotonic manifestations, we found that in twenty-eight instances the response to vagotropic drugs was positive in eighteen. Again, in thirty-one cases in which there were marked sympathicotonic signs of one sort or another observable clinically, twenty yielded a positive reaction on subcutaneous injection of epinephrin. We came to the conclusion, therefore, that a conspicuous vagotonic or sympathicotonic sign, as far as the material thus far studied is concerned, may also be a mark of a pilocarpin-sensitive or epinephrin-sensitive individual in about 64 per cent. of the instances.

As to whether an exaggerated tonus (or excitability) in one of the reciprocal antagonistic systems is accompanied by a diminution of tonus (or of excitability) in the other, our results differ somewhat from those of other workers. We found a harmonious agreement between the pharmacodynamic reactions and clinical manifestations in only seven of nineteen cases. In two patients who exhibited pilocarpin-sensitiveness the sympathicotonic signs were nearly as conspicuous as the vagotonic signs, and in three patients sensitive to epinephrin the clinical signs referable to heightened tonus in each of the systems were approximately equal. In five patients sensitive to epinephrin it must be admitted that clinically vagotonic signs predominated.

It is obvious, therefore, that the mere demonstration of pilocarpin-sensitiveness or of epinephrin-sensitiveness does not permit, in every case, of an immediate conclusion regarding heightened tonus in the vagal or in the sympathetic autonomic system. Nevertheless the setting up of a vagotonic type and of a sympathicotonic type