MEDICINE

New Blood Pressure Ill

Patients with the new high blood pressure disease differ from others in that they have very little salt in their sweat, gain weight suddenly, and may be hairy.

➤ A NEW high blood pressure disease and a sweat salt test for helping to detect it were announced at the meeting of the American Physiological Society in Augusta, Ga.

The name suggested for the new disease is Schroeder's Syndrome, because Dr. Henry A. Schroeder, of Washington University School of Medicine, St. Louis, Mo., first discovered it. Certain patients with high blood pressure, he found, had a set of symptoms, or a syndrome as doctors say, that made them significantly different from most patients with high blood pressure.

One of the important differences is that these patients have less salt in their sweat than other high blood pressure patients and less than the lowest for normal persons. This difference was discovered by Drs. Dean F. Davies and Helen E. Clark of Washington University.

The significance of this sweat salt difference, they pointed out, is that it shows that one group of high blood pressure patients have increased activity of their adrenal glands. Among many vital activities, these little glands just above each kidney help to regulate salt in the body. In the Schroeder's Syndrome patients, these glands are overactive in keeping salt in the body. Consequently there is less in the sweat.

In spite of many suggestions that these glands play an active part in high blood pressure, there has heretofore been no convincing evidence that they do. The experiments reported show not only overactivity of the glands in one kind of high blood pressure but also, and perhaps equally important, lack of increased activity of these glands in most cases of high blood pressure. The high blood pressure patients who did not fall into the Schroeder's Syndrome group had about the same amount of salt in their sweat as normal persons.

Schroeder's Syndrome patients also differ from other high blood pressure patients in other ways. They are over-fat with the fatness marked in the trunk, arms, thighs and face. They have had a sudden gain in weight, usually at certain periods such as after pregnancy or at the menopause. And they may be hairy.

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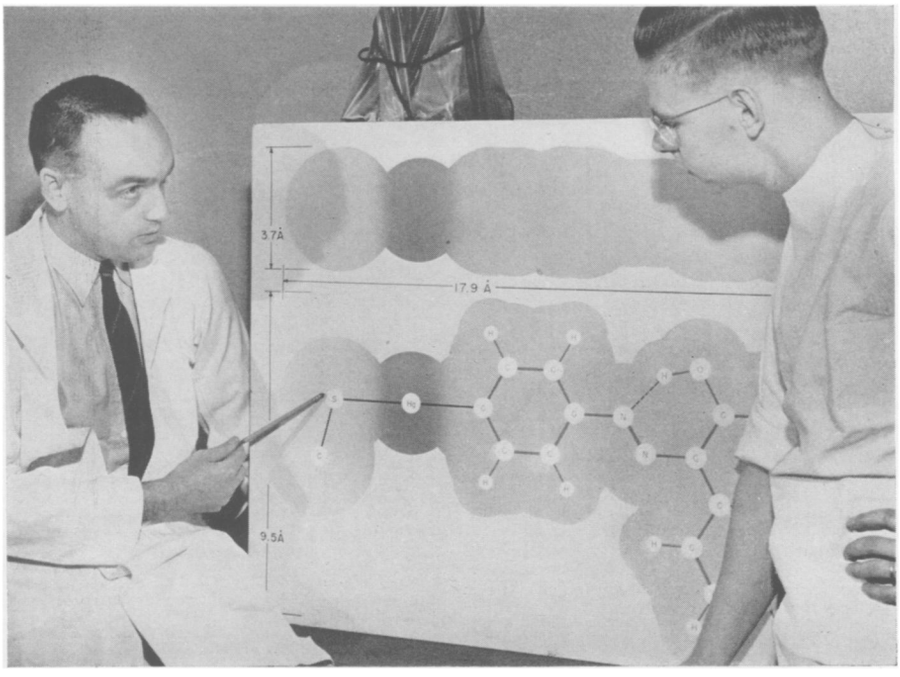

MERCURY RED-SIGNAL COMPOUND—What is believed to be the first chemical ever created to let scientists trace body chemicals by sight is being explained by Dr. H. S. Bennett, at left, head of the University of Washington anatomy department. This scale drawing of sulfur-containing molecule shows how red mercurial compound acts as a "red flag" when coupled to sulfhydryl group of tissues.

PSYCHOLOGY-VETERINARY MEDICINE

Grades Do Not Predict Success in Vet Study

➤ NEITHER high-school nor college grades are a satisfactory indication of what a student will do in a course of veterinary medicine, Dr. William A. Owens, of Iowa State College, has discovered.

Dr. Owens also found that scores on the American Council of Education psychological examination were not good predictors of success in the vet course.

This led Dr. Owens to develop four special tests for selection of students for the course. Two were achievement tests in chemistry and zoology, the most important for the pre-veterinary courses. The other two were tests of aptitude patterned after a standard test of medical aptitude but entirely new and employing representative veterinary content.

Results on these four tests were substantially related to success in the first year of veterinary training.

Dr. Owens described his study at the meeting of the American Psychological Association in Denver, Colo.

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BIOCHEMISTRY

New Compound Can Find Cancer, Muscle Chemicals

➤ CREATION of a new kind of substance for finding chemicals involved in cancer and other chemicals basically responsible for muscle movement was announced by Dr. H. S. Bennett of the University of Washington Medical School in Seattle.

The new substance is a chemical compound that contains mercury. When it combines with a special type of sulfur-containing compound, it signals the sulfur compound's location in red so that the scientist can see where the sulfur chemical is. The particular sulfur chemicals located are ones containing a combination of sulfur and hydrogen known as sulfhydryl. The sulfhydryl combination is important both in muscle functioning and in cancer chemistry.

The new mercury red-signal compound is believed the first chemical ever created to let scientists trace body chemicals by sight. Radioactive chemicals used as tracers or tags for body chemicals signal either by the sound of the Geiger counter of by taking their own picture on an X-ray plate which then must be correlated with the optical picture of the tissue under study.

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