

MEDICINE

Test for ACTH Dosage

Extremely accurate and effective, new tolerance test shows how much ACTH a patient can be given without bad or unpleasant effects.

► THE "first positive and foolproof test" showing how much ACTH a patient can be given without bad or unpleasant effects was announced at the ACTH conference sponsored in Chicago by Armour Laboratories, principal producer of the hormone.

ACTH is one of two hormone chemicals developed within the last year and a half which bring dramatic relief in arthritis and other conditions. Cortisone is the other of these so-called miracle drugs.

The ACTH tolerance test was devised by Dr. Robert S. Speirs and L. Wragg of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me. Trial of the test on arthritis patients at the Jewish Memorial Hospital, Roxbury, Mass., was made by Drs. Freddy Homburger and C. Bonner of Tufts College Medical School, Boston.

The test depends on a relation between certain blood cells, called eosinophils, and the adrenal glands. ACTH is a stimulator of the adrenal gland. The test is made on mice that have had their adrenals removed. Samples of urine from patients getting ACTH are injected. The number of eosinophils in the mouse's blood tells whether the patient's own adrenals have responded well to ACTH and whether he has gotten enough of the hormone.

The test is also believed to have useful possibilities for diagnosing various diseases, particularly those involving poor function of the adrenal glands.

Although the test is extremely accurate and effective, it must be done with completely standardized mice and very careful training. As soon as funds permit, Jackson Laboratory plans to establish a center at Bar Harbor for training teams of scientific workers to make the test with Jackson Laboratory mice.

Good for Spider Bites

ACTH, one of the two modern hormone remedies for arthritis, may be good medicine for snake and spider bites.

Two cases suggesting this were reported to the conference by Dr. Harley E. Cluxton, Jr., director of medical research for Armour Laboratories.

Both cases occurred in Savannah, Ga., where Dr. Cluxton formerly was in practice. One was that of a 32-year-old expectant mother who was bitten on the hand by a black widow spider.

Shortly afterward, she was seized with the characteristic signs of a severe reaction from black widow spider venom, including severe abdominal cramps. It was feared

that she would lose her baby. A single injection of ACTH relieved her pain, reduced the swelling and she was able to return home in a few hours, and remained in good health.

The experience, Dr. Cluxton said, suggested to various Savannah physicians that the hormone might also be valuable in treating snakebite, a fairly common accident in that area, and it was decided to try it on the next case reported.

Not long afterward another woman stepped on a copperhead snake in her garden in the Savannah area and was bitten on the ankle.

The victim arrived two hours later at a Savannah hospital, where ACTH was given. The leg was swelling rapidly and was extremely painful, but the hormone stopped the pain and produced complete recovery in a few hours.

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MEDICINE

Polio Risk Increased After Tonsil Removal

► A CHILD'S risk of getting polio during an epidemic is three times greater if he has

just had his tonsils removed. The risk of his getting the severe bulbar form of the disease is 11 times greater.

These figures, bearing out the suspicions of some but not all physicians, are reported by Dr. Gaylord W. Anderson, director of the University of Minnesota's School of Public Health.

Details of the statistical study, made with the assistance of Genevieve Anderson, Audrey E. Skaar and Franziska Sandler, and supported by the National Foundation for Infantile Paralysis, are reported in the ANNALS OF OTOLARYNGOLOGY, RHINOLOGY AND LARYNGOLOGY (September).

Science News Letter, December 16, 1950

MEDICINE

Doubtful That Fatness Leads to Heart Disease

► DEFINITE evidence that overweight causes heart disease or is responsible for its earlier development is lacking, Dr. Samuel Proger of Tufts College Medical School, Boston, declared at a meeting of the American Medical Association in Cleveland.

The theory of a connection between the two is, he stated, "based upon nothing more substantial than inferences only lightly touched by logic and impressions too frail to survive critical analysis."

While there may be doubt about fatness leading to heart trouble, there is not much doubt, he said, that overweight is harmful in persons who already have high blood pressure or heart disease.

The excess weight in such cases, he pointed out, is an added physical burden.

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GIANT "GEMS"—This interior view of a glass furnace looks like a mine in which huge "gems" are being cut. Actually the worker is breaking away the solidified glass to permit maintenance work on the furnace walls, a task which must be done every 30 months.