

## MEDICINE

# Relieves Blood Pressure

► **PROLONGED TREATMENT** of high blood pressure with guanethidine, or Ismelin, is successful.

Two studies of the drug's effects, each made on 38 patients, is reported in the *Journal of the American Medical Association*, 175:543, 1961. Drs. Irvine H. Page, Richard E. Hurley and Harriet P. Dustan of Cleveland said guanethidine had "the advantage over ganglioplegic (nerve-blocking) drugs in that sympathetic function is blocked, while parasympathetic is spared."

The parasympathetic nerves are part of the autonomic or self-governing nervous system, which controls activity below the level of consciousness, as the secretion of glands, intestinal action and heart action. The sympathetic nervous system is the other part. By the use of guanethidine it is claimed that the operation known as sympathectomy is made unnecessary. It is still performed for hypertension, or high blood pressure.

Drs. John T. Eagan and Edward S. Orgain of Duke University Medical Center, Durham, N.C., who treated another 38 patients, said (p. 550) that final conclusions regarding the ultimate usefulness of the drug "must await more extended experience." The drug was developed by Ciba Pharmaceutical Products, Inc., of Summit, N. J.

The physicians of America also will be reading in their official magazine that:

The first two operations performed with electrical anesthesia were successful and opened new vistas in anesthesia and clinical neurophysiologic research (p. 599). Reported by Drs. James D. Hardy, Leonard W. Fabian and M. Don Turner of the University of Mississippi Medical Center, Jackson, the operations drew editorial comment (p. 606).

The editorial said if further trial makes the technique safe for routine use, "dental extractions, animal work, burn dressings, and short operations under conditions of field warfare" would be desirable. The patients undergoing electrical anesthesia had advanced cancer.

A rare case of paralysis through tick bite occurred in a lumberman in Florida woods. Dr. F. W. Henderson, Lake City, Fla., reported (p. 616) that the man recovered after the ticks were removed. The ticks were male, considered less likely than female to cause paralysis. Also the ticks were the previously unsuspected lone star variety *Amblyomma americanum*.

The physician emphasized the need to search for ticks as a possible cause of ascending paralysis, which can cause death if not recognized early.

• Science News Letter, 79:132 March 4, 1961

## MEDICINE

# Find Potent Hormone

► **A PITUITARY HORMONE**, as yet unnamed, has been found to be more powerful than ACTH in making fat move in or out of tissues. This may throw light on the cause of atherosclerosis, a form of hardening of the arteries.

Dr. Daniel Rudman of Goldwater Memorial Hospital and Columbia University said that the new hormone substance is temporarily called "Fraction L."

Fraction L has the properties of a protein, made up of a long sequence of amino acids. More needs to be known of the hormone's biologic actions before it will be finally named.

The ultimate object of Dr. Rudman and his co-workers is to relate their findings in experimental animals to human disorders. So far they have found that the fatter the rabbit, the more responsive the animal is to the action of Fraction L.

The relationship of pituitary hormones to atherosclerosis is at the heart of the investigation. In seeking to understand the causes of atherosclerosis, Dr. Rudman's group is trying to find out the mechanisms regulating the amount of fats in the circulating blood.

The amount of fat in the blood is one of the important factors, although not the only one, in causing hardening of the arteries.

The release of fat stored in the adipose (fatty) tissues of the body has until recently been overlooked, but it is known that one of the important regulatory agents is the pituitary.

The two other sources of fat in the blood are the diet and the body's own manufacture; sugar, for example, is rapidly converted to fat.

The New York Heart Association said the work of Dr. Rudman and his associates is "one more step up the ladder of knowledge in the complex subject of atherosclerosis and its relationship to the varying levels of fatty substances in the blood."

Dr. Forrest E. Kendall, professor of biochemistry, Columbia University College of Physicians and Surgeons, heads the project.

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## PHARMACOLOGY

## Tablets and Injections Help Low Back Pain

► **PAIN CAUSED** by arthritis of the spine, back sprains and bursitis has been alleviated by a new drug, Phenyramidol. A combination of tablets and intravenous injection is recommended.

Dr. Timothy A. Lamphier of Boston said in an interview that 74% of 300 patients he had treated showed excellent response.

Dr. Lamphier, who has had experience treating Boston Red Sox players, said many of his patients were industrial workers who have suffered sprains or other injuries in constructing the new East Boston tunnel.

The new drug provides two things, Dr. Lamphier said. It acts like codeine in killing pain, and it has muscle-relaxing properties.

The only side effects patients have noticed after injections are slight giddiness, a warmth that travels in a minute or two to the chest and then to the back, and a numbness of the tongue, along with a metallic taste.

• Science News Letter, 79:132 March 4, 1961

## SCIENCE NEWS LETTER

VOL. 79 MARCH 5, 1961 NO. 9

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

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Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.

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