

MEDICINE

# New Group of Diseases Cured by Sulfanilamide

## Southern Medical Association Learns of Modern Treatment for Drug Addicts; Shock Cure Studied

REPORTS of successful use of the drug, sulfanilamide, in a new group of diseases were made by Drs. Perrin H. Long and Eleanor A. Bliss of the Johns Hopkins Hospital, Baltimore, at the meeting of the Southern Medical Association at New Orleans.

First American report of the use of this powerful remedy was given by these same investigators at the meeting just a year ago of this medical organization. At that time the Baltimore scientists reported cures of erysipelas, childbed fever and other streptococcus-caused ailments with sulfanilamide treatment.

This year they reported its healing effect in the painful and generally stubborn illnesses due to infection of the urinary tract. Cases that had lasted for from five to seven years and in which all other forms of treatment had failed were cured by sulfanilamide. The drug, Dr. Long said, kills practically all of the germs which commonly infect the urinary tract.

The all important factor in treating these conditions is to obtain the proper concentration of the drug, that is, to get enough of it into the urinary tract to kill the germs. The amount necessary can be determined by laboratory tests.

Laboratory tests, also, can show whether or not sulfanilamide will cure cases of streptococcus infections, the condition for which the drug was first tried. There are many varieties of streptococci. Not all of them are susceptible to the action of the drug, research reported by Drs. Long and Bliss and their associate, W. H. Feinstone, showed.

### Identification Important

Identification of the particular streptococcus that is causing illness in a particular patient is of prime importance. The Baltimore scientists told how these germs may be identified and which ones can be killed by sulfanilamide.

Group A and Group B hemolytic streptococcal infections in man can be cured by the drug. Good results have been obtained in treating group C hemolytic streptococcal infections in dogs and horses. Group D hemolytic strep-

tococcal infections in man are unaffected by the drug. Alpha streptococcal infections, the kind found in the heart disease known as subacute bacterial endocarditis, are in general not affected by sulfanilamide treatment.

### Drug Addicts Treated

Since May, 1935, some 3,000 drug addicts, most of them federal prisoners, have been admitted to the U. S. Public Health Service's hospital at Lexington, Ky. Details of the treatment of narcotic drug addiction at this institution were reported by Drs. Lawrence Kolb and W. F. Ossenfort.

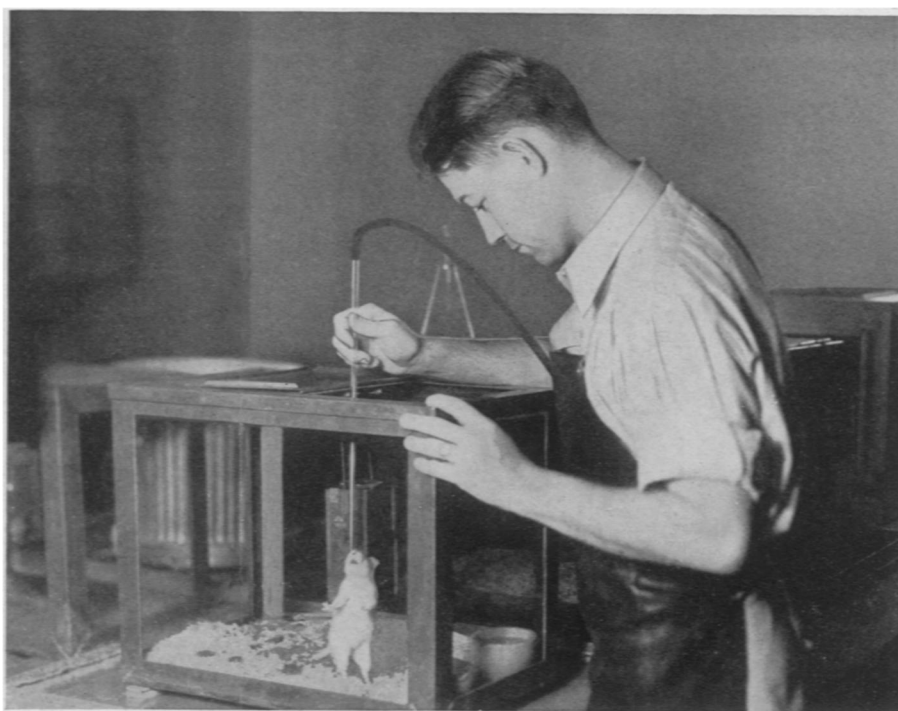
The program of treatment is achieving good results, the physicians believe, although legal complications make it impossible to give an accurate estimate of

results at present. The physical condition of the patients is almost always remarkably improved and their power of resisting influences that might make them revert to addiction is strengthened in the vast majority of cases.

Chief feature of the hospital's program for eradicating drug addiction is that, although most of the addicts are prisoners, they are treated as patients who are mentally ill. Discipline, when necessary, is under the direction of the psychiatrist. Another important feature is the effort made by the hospital authorities to follow the patient after his release and help him avoid relapsing into addiction again. Whenever possible, a job is found for the patient before he leaves the hospital. The social service department tries to promote a helpful attitude on the part of relatives, friends and officials. Members of the hospital staff keep up an active correspondence with former patients after their discharge.

### Study Shock Cure

Patients restored to sanity by insulin or metrazol shock treatment seem to undergo during the treatment a strong temporary disruption of their brains and central nervous systems. This appears



### VACUUM CLEANING

*A U. S. National Institute of Health researcher, Oren G. Hefner, is vacuum-cleaning fleas from a white rat in connection with Public Health Service studies of rat-flea-borne typhus fever in the United States.*

from the symptoms seen during the insulin shock and the metrazol convulsion, Dr. Lewis A. Golden of Tulane University School of Medicine told members of the Southern Medical Association.

Why the mind functions in a normal manner after this severe disturbance is unknown. Dr. Golden believes that the first step toward learning why the treatment is effective and how it works is to study and describe the bewildering array of symptoms of mental and nervous disruption that occur during the treatments.

### Bedridden Helped

Successful treatment of a limited number of cases of muscle weakness disease was reported by Drs. Carlo J. Tripoli and Howard H. Beard, of Louisiana State University Medical Center and State Charity Hospital.

The treatment consisted of adding to the patient's diet one of the amino acids, which are the building blocks of proteins such as meat. No cures were achieved but some of the patients, so weakened by the muscle disease they had been bedridden, recovered enough to lead active lives and to be classed as "almost normal."

The treatment must be continued for an indefinite period, if not for life, the physicians believe. No patient maintained his improvement when treatment was stopped. Early diagnosis and prompt beginning of treatment were also stressed as important. Patients suffering from 12 different types of muscular weakness or disability, including infantile paralysis and paralysis following ginger jake poisoning, were given the treatment. The infantile paralysis and ginger jake patients were not helped, but those suffering from myasthenia gravis and muscular dystrophy were.

Adding amino acetic acid to the diet increased the appetite and weight of most underweight persons, the study revealed.

### Stomach As Guide

Acidity of the stomach contents may mean indigestion or it may mean that disease is present somewhere else in the body than the stomach. How a study of stomach function can help in diagnosing other ailments besides stomach complaints was explained by Dr. Frank L. Apperly of the Medical College of Virginia at Richmond.

Changes in the acidity of the stomach contents may occur in perfectly healthy people although these changes do often come with indigestion. These changes

in acidity are usually just the mirror of certain chemical changes in the blood, Dr. Apperly found from experiments conducted both in Richmond and in his laboratory at Melbourne, Australia.

Anything that lowers the amount of bicarbonate in the blood lowers the acidity of the stomach contents. The reverse is also true. Blood bicarbonate and stomach acidity may be lowered by overbreathing, anemia, high altitudes, fevers, chronic nephritis, diabetic acidosis and pregnancy. The blood bicarbonate and stomach acidity may be lowered by certain chronic heart and lung diseases and by taking alkalies and by insulin.

### Vitamin Lack

Lack of appetite, discomfort after eating and many other common symptoms of digestive disorder may also be the early signs of disorders due to a diet that lacks vitamins, Dr. J. H. Musser of the Tulane University School of Medicine pointed out.

In scurvy, pellagra and beriberi, diseases caused by not eating enough vitamins, digestive disorder symptoms are outstanding, although in severe cases they may be overshadowed by other symptoms. Early in these and other diseases of vitamin lack, the digestive symptoms may be the chief signs of illness.

The digestive disorder symptoms are of most importance in cases of chronic vitamin deficiency, in which the patient may for long periods live on a diet that is low but not altogether lacking in vitamins. Such a patient might never show the characteristic signs of severe scurvy or beriberi, but would have the digestive disorders.

Dr. Musser listed pregnant women, nursing mothers, growing children, patients with hyperthyroidism, fevers and wasting diseases, persons who diet and those who have food allergies or idiosyncrasies as among those who eat the bare minimum of vitamins required, but never get the optimum amount and who consequently suffer chronic vitamin deficiency and complain of various digestive disorders.

Dramatic improvement in the condition of such patients is sometimes obtained, Dr. Musser reported, by putting them on a diet containing much roughage and therefore plentiful vitamins, even though such a diet might seem wrong for a person with digestive disorders.

*Science News Letter, December 11, 1937*

The sky around the planet Mars is believed to be much darker than our pale sky, in fact, an indigo shade.



### GENUINE

*A nine-year-old cloud of suspicion was cleared from this art treasure by careful scientific tests. The crystalline structure of the marble was examined and evidence of time and weathering attested to its age.*