MEDICINE

Banthine for Ulcers

This chemical effectively treats even peptic ulcers of long standing. General distribution of the drug is now planned in order to make general use possible.

➤ ULCERS of the stomach can be treated successfully without surgery through use of a new chemical, called banthine.

Even peptic ulcers of considerable severity and long standing were relieved and healed by banthine doses in the clinical trial reported by a team of Duke University physicians to the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (July 8).

The effect on symptoms of patients using banthine, usually four doses by mouth a day, has been "gratifying," Drs. Keith S. Grimson, C. Keith Lyons and Robert J. Reeves report. The treatment promptly relieves the pain of ulcer and those originally incapacitated, with only two exceptions, returned to regular work.

In the test series of a hundred patients, 50 of the 55 who would conventionally require surgery have not required an operation. Of 38 patients with duodenal ulcer without indications for surgery, 34 are now able to eat regular food.

Banthine, the drug used in the ulcer

treatment, is a quaternary ammonium compound with the long chemical name of beta-diethylaminoethyl xanthene-9-carboxylate; and it is used as the methachloride or methabromide. Because of the encouraging results obtained in the Duke Medical School tests, general distribution of banthine is planned in order that physicians may now use it. The drug is produced by G. D. Searle & Co., Chicago.

The usual schedule used by the Duke doctors in treating ulcer patients was 100 milligrams every six hours day and night. After three to eight weeks when healing has occurred, patients decrease the amount of banthine taken to 50 milligram doses, or 200 milligrams a day, continuing this indefinitely. They go back to larger doses if pain again develops under tension, strain or illness.

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MEDICINE

Tools Help Blind See

➤ ELECTRONIC pencils which "read" to blind people, a typewriter which communicates with the deaf-blind, a magnifier based on television principles, these are some of the instruments shown in Philadelphia to a research session of the American Association of Instructors for the Blind.

Many of the new tools to help the blind "see" are complicated arrays of electronic tubes and some of these have not yet been perfected. But a simple attachment to a typewriter, without any electronic tubes, enables a person who can type to talk with

any deaf-blind person at the speed he can type.

The attachment is a little box containing a reel on which are printed the Braille characters. The blind-deaf person places his finger on a hole in the top of the box and as his friend types a letter on the typewriter, it is brought up to the hole and the blind-deaf person "reads" it with his finger.

The instrument was developed by the technical research division of the American Foundation for the Blind.

Three "guidance" devices which use the techniques of radar to warn blind persons of obstacles were demonstrated. However, the demonstrators emphasized that all the devices are still in the experimental stage and need a great deal of work before the average blind person can use them.

The results of tests with a "reading pencil" developed by Dr. Vladimir Zworykin of the R. C. A. Laboratories were reported to the session by a member of the staff of the Institute for Human Adjustment at the University of Michigan, Dr. Emily Willerman. She and Dr. Wilma Donahue found that, with the pencil, a blind person can learn to read ordinary print and typewritten copy.

The pencil, pointed at a letter, translates the shape of the letter into a distinctive noise which is heard by the blind person through a hearing aid.

Changes in type, however, are confusing and it usually takes additional instruction when the style of type is changed. In about 25 hours, the average blind person can achieve a vocabulary of about 190 words which can be read in sentences.

The first experimental model of an electronic magnifier for almost blind persons, demonstrated at the session, was based on television principles. A small oscilloscope, in an instrument about the size of a flashlight, scans the type to be magnified and it is then transmitted to an ordinary tele-



READING PENCIL—Nancy Bradley, 8, Kenwood, Pa., who was totally blinded in a sledding accident when she was five, tries out an electronic stylus, a "reading pencil," developed by R.C.A. The pencil translates letters in a line of type into recognizable sounds. Dr. Emily Willerman, of the University of Michigan, shows Nancy how to operate the mechanism.