

MEDICINE

New ACTH, Cortisone Use

ACTH and cortisone are now being used to treat depressed patients due to their stimulative effect observed in the treatment of arthritic patients.

➤ A FEW patients with depressions are now getting the 1949 arthritis wonder drugs, ACTH and cortisone. This was revealed by Dr. Edward F. Rosenberg of Michael Reese Hospital, Chicago, at the meeting of the American Medical Association in Washington, D. C.

Reason for trying these drugs on depressed patients, he explained, is that when given to rheumatoid arthritis sufferers, the drugs not only banish the arthritis symptoms but have a marked stimulating effect on the patient's mood.

A patient who gets a dose in the afternoon will be busily straightening up her room, rearranging clothing in closets and the like when the doctor comes for his evening visit, Dr. Rosenberg said. The effect is slightly more than a feeling of well being.

Trial of the drugs on depressed patients, Dr. Rosenberg stated, is being made by a psychiatrist, Dr. Roy Grinker of Chicago. Dr. Rosenberg himself is an arthritis specialist, and has used the drugs for arthritis patients.

Results with both drugs have been identical, he said, so far as relieving the arthritis is concerned. ACTH, the gland product from hog pituitaries which stimulates the adrenal glands, has a few more disadvantages than cortisone, in his opinion. One disadvantage is that the supply is more

limited. Because ACTH is a very complex protein chemical, the chances of its being made synthetically are almost non-existent. ACTH also, in Dr. Rosenberg's experience, produces slightly more side effects, such as acne and swelling from water retention.

Cortisone is a hormone produced by the adrenal glands and has been synthesized, but supplies of this also are very limited because the synthesis must start from an animal product, bile acids, and the synthesis is complex and has a very small yield.

Six chemicals related to cortisone, called steroids, have been tested by Dr. Rosenberg and associates. None of them has proved effective in rheumatoid arthritis.

Rheumatic fever may yield to cortisone, but it will be a generation before doctors can tell positively about this.

Neither chemical is effective in osteoarthritis, Dr. Rosenberg stated.

The nation's 2,000,000 arthritis patients and their doctors, he warned, should not sit around waiting for cortisone to become plentiful. Rheumatoid arthritis patients can be helped by methods known and used before the discovery of cortisone. Delay in starting these other forms of treatment, he warned, may result in permanent deformities.

Science News Letter, December 17, 1949

MEDICINE

New Syphilis Treatment

➤ A NEW treatment for syphilis has been discovered. It is chloromycetin, originally obtained from a germ found in Venezuelan earth.

The sores of early syphilis start healing within 24 hours after treatment with this drug is started, four doctors from George Washington University School of Medicine report in the scientific journal, *SCIENCE* (Dec. 9).

This is the first report of success with this drug in treating syphilis in humans, although another group of scientists had reported it effective in experimental syphilis in rabbits.

The George Washington University scientists who tried it in human syphilis patients are Drs. Monroe J. Romansky, Sidney Olansky, S. Ross Taggart and Eugene D. Robin.

After trying various dosages, they found the best scheme was to give the patients six equal doses by mouth every four hours

for six to eight days. In most patients the sores were completely healed at the end of treatment.

A more effective means of controlling syphilis may now be possible, Dr. Romansky pointed out, by using chloromycetin in combination with other antibiotic drugs, such as penicillin.

Trial of chloromycetin in late stages of syphilis is now under way.

Science News Letter, December 17, 1949

PHYSICS

Geiger Counter Tubes are Protected by Canning

➤ ALTHOUGH a can opener still will not be standard equipment for an atomic physicist, nevertheless he can now get his Geiger counters in a can.

The can, similar to that used for tennis balls, is said to give extra protection to the

sensitive tubes that are used to detect radioactivity. The tubes are wrapped in cotton batting before being sealed.

It is claimed by Tracerlab, the concern for which the American Can Company designed the tennis-type can, that the container protects the thin mica windows of the tubes from the stresses due to changes in atmospheric pressure during air shipment.

Science News Letter, December 17, 1949

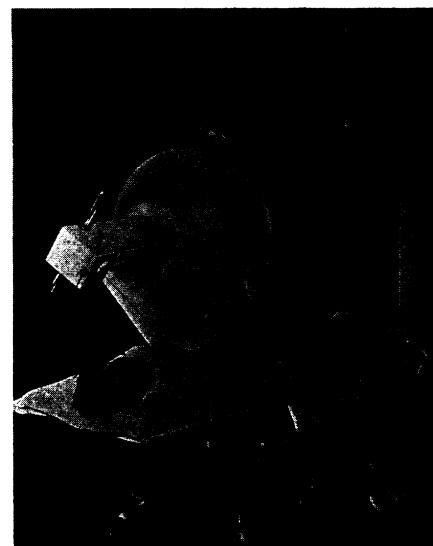
MEDICINE

X-Ray Machine Treats Twice as Many Patients

➤ TWICE as many cancer, leukemia and other patients per day can be given X-ray treatments as formerly was possible with a new machine announced by the General Electric X-Ray Corporation at the meeting of the Radiological Society of North America.

The machine can deliver X-rays at voltages from 100,000 to 250,000, said to be the widest range or radiation ever produced by a single treatment unit. This wide range and the machine's "phenomenal intensity" are due to use of a beryllium "window" in the tube. Because beryllium is more transparent than glass to the passage of X-rays, the new machine can, if desired, be made to deliver nearly twice the number of roentgens per minute that are produced by earlier tubes in its class. (A roentgen is the unit of measure of radiation.)

Science News Letter, December 17, 1949



MAXITRON 250—The "three-in-one" therapy X-ray machine demonstrates treatment to the breast. The bolus bag scatters secondary radiation back into the part of the body being treated.