MEDICINE

New Pain-Relieving Drug

➤ A NEW and different pain-relieving drug was reported at the American Medical Association meeting in San Francisco.

Dr. John S. Lundy of the Mayo Clinic and Foundation, Rochester, Minn., who reported it, hailed it as perhaps opening a 'new, safer and more pleasant era in the art and science of pain relief."

The drug is known so far only by its code name, MRD-125. Its special feature is that it can banish pain, even the pain of a surgical operation, without putting the patient completely to sleep.

This action Dr. Lundy called "analgesic," in contrast to the anesthetic action of drugs such as ether. As an example, Dr. Lundy told how a three-year-old girl with thirddegree burns over a fourth of her body was able to stand the pain of having the dressings changed when given an injection of MRD-125.

Previously her physician, Dr. Paul H. Lorham of the University of Kansas Medical Center had had to make her completely unconscious with an anesthetic to stop the pain of dressing changing. With MRD-125 the little girl was awake, felt no pain, and could lift her leg or arm when told to do so as the doctor worked on the bandages.

The first time the new drug was used was for a patient about to have teeth pulled. One doctor watching the procedure and seeing the patient conscious enough to swallow and close his eyes on command ran from the room saying he "could not stay and witness this torture."

However, Dr. Lundy reports, there was no torture and no pain.

The drug is made by the Wm. S. Merrell Company of Cincinnati, Ohio.

Since it became available to him a year ago, Dr. Lundy has used it on 112 patients. Most of these were having teeth pulled. Some were undergoing operations on eye muscles and others were having hemorrhoids removed.

The drug can be used as the only painkiller, but it can be given in smaller doses if other medicines are given first to quiet the patient. One such is trade-named Hyatrobal.

Science News Letter, July 3, 1954

MEDICINE

Prevent Fever Relapses

➤ REPEAT ATTACKS of rheumatic fever with consequent serious heart damage in children can now be prevented by once-a-month shots of a new long-acting penicillin, Dr. Gene H. Stollerman of Irvington House, Irvington-on-Hudson, N. Y., announced at the meeting of the American Rheumatism Association in San Francisco.

The new penicillin is called Dipenicillin Other medicines, including other forms

of penicillin, given in recent years to prevent return attacks of rheumatic fever must be taken one or several times each day to be effective. Children, especially when they do not feel sick, are all too likely to skip the daily or three times daily pills. This makes them run the risk of another rheumatic fever attack.

The difficulty of keeping up this daily treatment until adulthood is shown by the fact that only 45 of 315 children followed for two years were getting the treatment. This study was reported by Dr. H. J. Dodge of Denver.

The Dipenicillin G, Dr. Stollerman pointed out, is given by a doctor or nurse so "we know the patient has gotten it." His study showing its effectiveness was made on 138 out-patients, children who had recovered from acute rheumatic fever, and another 270 rheumatic children hospitalized in Irvington House in the acute and convalescent stages of the disease.

"There were no recurrences of rheumatic fever observed in either group," Dr. Stollerman said. "All patients admitted to the study without clinical evidence of heart disease remained normal during the twoyear period of treatment. New changes to the valves (of the heart) did not develop in patients who had some organic heart disease initially.'

Science News Letter, July 3, 1954

MEDICINE

Extra Cortisone Ration Given Before Operation

➤ ARTHRITIS PATIENTS undergoing operations will get along better if given an extra "emergency ration" of the antiarthritis cortisone which they have been taking, Dr. Philip S. Hench of the Mayo Clinic, Rochester, Minn., Nobel prize winner and co-discoverer of cortisone for arthritis, declared at the meeting of the American Rheumatism Association in San

Cortisone is an adrenal gland hormone released under the stimulation of the pituitary gland.

Some patients who have received preoperative preparation with cortisone, Dr. Hench said, "might have been able to withstand the stress without the preparation.

'Unfortunately, currently available methods do not permit any accurate assessments of the adequacy of a person's pituitary-adrenal response. But from experience we know that the pre-operative preparation with cortisone has eliminated fatalities from postoperative insufficiency of this glandular response.'

Dr. Hench added that the cortisone buildup has not in any way impaired the healing of wounds or the body's resistance to infection.

The cortisone emergency ration is started 48 hours before the operation so as to provide a "bulwark" against the strain of the operation. It has not only helped arthritics withstand safely the effects of surgery but also the effects of anesthesia, severe injury and burns.

Science News Letter, July 3, 1954

SCIENCE NEWS LETTER

VOL. 66 JULY 3, 1954 NO. 1

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. Edited by WATSON DAVIS. Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1954, by Science Service, Inc. Republication of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index. 1

Member Audit Bureau of Circulation. Advertis-ing Representatives: Howland and Howland, Inc., 1 E. 54th St., New York 22, Eldorado 5-5666, and 435 N. Michigan Ave., Chicago 11, SUperior 7-6048.

SCIENCE SERVICE

The Institution for the Popularization of Science

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Karl Lark-Horovitz, Purdue University; Kirtley F. Mather, Harvard University; Paul B. Sears, Yale University. Nominated by the National Academy of Sciences: Homer W. Smith, New York University; Edward U. Condon, Corning Glass Works; Harlow Shapley, Harvard College Observatory. Nominated by the National Research Council: Duane Roller, American Association for the Advancement of Science: Ross G. Harrison, Yale University; Leonard Carmichael, Smithsonian Institution. Nominated by the Journalistic Profession: Neil H. Swanson, Baltimore, Md.; O. W. Riegel, Washington and Lee University; Michael A. Gorman. Flint Journal. Nominated by the Scripps Estate: Charles E. Scripps, Cincinnati, Ohio; Edward J. Meeman, Memphis Press-Scimitar; John T. O'Rourke, Washington Daily News.

Officers—President: Leonard Carmichael; Vice

Officers — President: Leonard Carmichael; Vice President and Chairman of Executive Committee: Charles E. Scripps; Treasurer: O. W. Riegel; Secre-tary: Watson Davis.

tary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, Marjorie Van de Water, Ann Ewing, Allen Long. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. Interlingua Division in New York: Alexander Gode, Hugh E. Blair, 80 E. 11th St., GRamercy 3-5410.