

MEDICINE

New Morphine Substitute

► **THE SEARCH** for a nonaddicting substitute for morphine has apparently been rewarded by experiments with the drug, methotrimeprazine, according to a report in the *Journal of the American Medical Association*, 178:887, 1961.

This new phenothiazine derivative with pain-killing properties was tried successfully on a group of surgical patients at the Baltimore, Md., City Hospitals, Drs. Louis Lasagna and Thomas J. DeKornfeld of Johns Hopkins University School of Medicine reported.

Nalorphine, the only other potent analgesic that did not cause addiction, "has unfortunately proved impractical for clinical use because of its bizarre mental effects," the doctors stated. Injecting methotrimeprazine provided pain relief equal to that achieved with morphine. However, the new drug taken orally produced side effects and little pain relief.

Aid to antibiotics in treating 30 pneumonia patients was reported through use of the enzyme, pancreatic dornase. Half of the patients had staphylococcal pneumonia, some with lung abscesses, Drs. Robert Spier, Ernest Witebsky and John R. Paine of the Buffalo (N.Y.) General Hospital said. The aerosolized pancreatic dornase was excellent for thinning out mucoid secretions (p. 878).

MEDICINE

Test Tube Babies Common

► **BETWEEN** 5,000 and 7,000 babies each year are born in the United States as a result of artificial insemination, according to an estimate by Dr. Alan F. Guttmacher of The Mount Sinai Hospital, New York.

There are two distinct types of artificial insemination: either the husband's semen is introduced artificially or an unrelated donor's semen is used. The choice depends on hereditary and other factors.

Dr. Guttmacher spoke at a conference on the cervix, sponsored by the New York Academy of Sciences.

The physician bears the full responsibility for selection of a donor, Dr. Guttmacher believes. He must explore the life of the donor, and his genetic and environmental background. Many doctors choose medical students or young residents in medical centers who are married and are fathers. A general physical resemblance to the father is usually sought.

The doctor also must be certain that the prospective parents are mature and will have a sense of modesty about the origins of their child or children in case an outside donor is used.

Few legal difficulties have been encountered, as common law contains no statutes on artificial insemination. For the present, Dr. Guttmacher advised physicians to "forget signed papers" and "accord paternity

Varicose vein operations showed excellent results in 71% of 416 patients followed up from one to 14 years, Drs. Giorgio Agrifoglio and Edward A. Edwards of Harvard Medical School reported. They said the more complete the procedure the better the results (p. 906).

Booster injections to insure immunization against tetanus should be given more frequently than in the past, Drs. George C. Kaiser, Robert D. King, Robert E. Lempke, with Marvin H. Ruster, all of the Lilly Research Laboratories, Indianapolis, reported. A study of 41 male veterans of World War II showed the shortest interval between shots was more than 14 years (p. 914).

Extreme septic shock was treated successfully in 50% of patients whose body temperature was cooled to a safe level of 89.6 degrees Fahrenheit, Drs. Emil Blair, Robert W. Buxton, Adams Cowley and Arlie R. Mansberger Jr. of the University of Maryland School of Medicine, Baltimore, reported. The researchers said there was no evidence that cooling directly affected the infectious process itself at the level they employed. However, general benefits resulted, giving added time for treating the underlying cause of the illness (p. 916).

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to the husband in both the hospital record and the birth certificate."

He said the procedure can give "great happiness to properly selected parents."

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PSYCHOLOGY

Human Behavior Affected By Atmospheric Changes

► **THERE IS A REASON** when people say they feel a storm coming on. It may be a sixth sense responding to changes in atmospheric conditions, a physicist said.

There may even be a relationship between the number of admissions to psychiatric hospitals and changes in the earth's magnetic field, Dr. Charles Bachman of the physics department, Syracuse University, Syracuse, N.Y., believes.

Dr. Bachman and his colleagues, Dr. Robert O. Becker of Syracuse Veterans Hospital and Dr. Howard Friedman of the psychology service of that hospital, are planning to study further the effects of atmospheric factors on the biologic system.

A monitoring system will be set up in Syracuse to keep a constant record of fluctuations in the earth's magnetic fields and changes in the ion and ozone content of the air. The scientists will work closely with

the Atmospheric Science Research Center of New York State University.

The new cooperative work has already been aided considerably by the development of a new type of electrode that is placed on the body. The electrode can operate for hours compared to only a few minutes of older types.

In one phase of their investigations, Drs. Bachman and Becker attached electrodes to patients during operations and traced the direct current fluctuations of the body under anesthesia. They found definite shifts in the direct current field.

They also found that application of direct current speeds up wound healing.

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