

PEDIATRICS

Infant Acquires Addiction

A CHILD can become a dope addict before he is born if his mother takes narcotics during her pregnancy.

The problem of addiction in the newborn infant may multiply in the near future due to the increasing trend in drug addiction, Drs. Ralph W. Cobrinik, R. Thornton Hood Jr., and Emanuel Chusid, all of the New York Medical College, explain.

The three investigators studied 22 newborn infants whose mothers were addicts plus a review of the literature of the narcotics problem in the newborn since 1875. Their conclusions were that:

1. Infants exhibit narcotic addiction by presenting difficulty in feeding, vomiting and diarrhea, yawning, sneezing and fever. The severity of these symptoms appeared to depend upon how much of the narcotic was taken by the mother and her method of taking it.

2. Paragoric, phenobarbital, chlorpromazine, calcium and reserpine were used in treating the infants. The most effective results were obtained with paragoric and chlorpromazine in diminishing amounts.

MEDICINE

Test Synthetic Narcotic

THE LONG ARM of the Narcotics Bureau is encircling a synthetic drug even before it hits the market.

Whether or not the drug proves to be useful as a pain killer is incidental to narcotics investigators. They want to be sure that it is not mass produced for indiscriminate distribution to the public.

The drug is 3-Hydroxy-N-phenacilmorphinan. It has been produced to kill pain. It may do the job. It may not.

Clinical studies are being conducted by the U. S. Public Health Service Hospital in Lexington, Ky. Previous studies revealed to scientists that the drug, supplied by Hoffmann-La Roche, Inc., Nutley, N. J., can cause

Too rapid or too sudden a reduction of the dose only brought the infant back to its condition at birth.

3. A review of the literature revealed that one mother who took a large daily dose of morphine, 600 mgs, delivered a normal infant. One of the 22 mothers studied took less but had an addicted infant at birth. Therefore, each mother's ability to addict her unborn child is an individual case.

4. Among those infants addicted through their mothers, 37 received no therapy. Of these, 33 died, the doctors report in their review of available literature.

Many doctors appear to agree that if the addicted pregnant woman is not seen until her seventh month of pregnancy, there should be no attempt to withdraw her from the drug until two months after the birth of the baby. Since they have obtained excellent results with proper care of the newborn, there is little reason to jeopardize the pregnancy by treating the mother severely, the researchers report in *Pediatrics* (Aug.).

Science News Letter, August 22, 1959

the "naked" male was mated with a normal, hairy female, the scientists received the expected ratio of one normal baby for each eventually hairless one. This means that the mortality rate for the "naked" female litters was three times as high as the mortality rate for litters of normal females.

Babies that died were the "runts" of the litters. Many of these babies broke one or more legs. The offspring of naked mothers exhibited fragile bones, inadequate lung inflation and inferior growth, the scientists report.

It is conceivable that some such antagonistic gene property is operating in monogoloidism, they suggest.

Science News Letter, August 22, 1959

SCIENCE NEWS LETTER

VOL. 76 AUGUST 22, 1959 NO. 8

Edited by WATSON DAVIS

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. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; 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 © 1959 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also publishes CHEMISTRY (eight times a year) and THINGS of Science (monthly).

Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



SCIENCE SERVICE

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: William W. Rubey, U. S. Geological Survey; Wallace R. Brode, National Bureau of Standards; Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution; John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Lee Hills, Detroit Free Press. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Frank Ford, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio.

Officers—President: Leonard Carmichael; Vice President and Chairman of Executive Committees: Charles E. Scripps; Treasurer: Wallace R. Brode; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Helen Buechi, Ann Ewing, Richard Litell, Allen Long, Jane Marye, Elisabeth Mitchell, Ralph Segman, Howard Simons, Benita Tall, Marjorie Van de Water. Science Youth Division: Joseph H. Kraus, Dorothy Schriver, Shirley Moore. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562.

GENETICS

Find Genetic Link

"NAKED" MICE have provided the scientific world with a mysterious link in the heredity chain.

These mice that lose all of their hair by the time they reach the age of seven months are a special offshoot of normal, hairy mice. The "naked" mice comprise a separate mutant group.

Drs. W. F. Hollander and John W. Gowen of Iowa State College, Ames, report in the *Proceedings of the Society for Experimental Biology and Medicine* (July).

The female mice belonging to the group that loses its hair appear to have some genetic antagonism toward their own babies. An unusual number of the babies of these

addiction. Now they want to determine if it can kill pain.

More than 35 such synthetic drugs have been produced over the past few years. Only a few have made the grade as pain killers because they must also lack strong addicting properties. The ideal pain killer would be effective, yet have no poisonous side effects and no addicting properties.

Those that have been accepted for medical purposes and are available only on prescription include Dromoran, methadone, Demerol, and Nisentil. All are under the Government's narcotics regulations because they are capable of causing addiction when used over a period of time.

Science News Letter, August 22, 1959

mice die within two weeks after birth, the researchers explain.

When one of these "naked" females is mated with a normal male, genetic law in this instance states that half of the offspring will be hairy, the other half will be hairless within seven months. But such matings produced twice as many mature hairless mice as normal. This was found to be due to a high mortality rate among the newborn hairy babies.

These deaths are due mainly to the size of the litter and milk feeding problems, and growth disturbances, all of which were more significant among the naked mothers' litters.

Yet when the situation was reversed, and