MEDICINE

Better than Morphine

Metopon, derived from opium, relieves pain of dying cancer patients. Is habit-forming, but addiction builds up less rapidly. Methadon even better.

➤ A DRUG better than morphine for stopping the intense pain of dying cancer patients is now available. Called metopon, it is derived from opium, like morphine. It is habit-forming like all opium drugs, but addiction to it builds up more slowly.

This latest step in man's conquest of pain was reported by Dr. Nathan B. Eddy, of the U. S. National Institute of Health, Bethesda, Md., speaking before the analgesics conference of the New York Academy of Sciences.

"Metopon has no equal for oral (mouth) administration for chronic pain," said Dr. Eddy, "if its use is started before tolerance and dependence on other narcotics have developed."

The patient being treated with metopon does not get as much feeling of well-being (euphoria) as injections of morphine would give him. Tolerance to the drug, making larger and larger doses necessary, develops more slowly than with morphine.

Metopon is made from opium by a "distressingly complicated process," Dr. Lyndon F. Small, National Institute of Health chemist, told the conference.

For over a decade chemists have attempted to produce a drug as effective as morphine in stopping pain without morphine's ability to make addicts of its users. Metopon does not quite succeed in this respect. No active morphine derivative has yet been made which is free of addiction liability.

Given by mouth metopon has given fair or better relief of pain in the last stages of cancer in 74 out of every 100 patients, Dr. Eddy reported. In those patients who had not previously been given morphine or related substances, metopon gave fair or better pain relief in 91 out of every 100 patients.

Metopon, being an opiate, comes under the control of the Federal narcotic drug laws. In order to make doubly sure that it would not be misused and create new drug addicts, it has been released only for use to relieve chronic pain in cancer patients. This was possible because the patent for the drug was assigned to and is now owned by the United States government. The distribution procedure provided also for doctors prescribing it to supply Dr. Eddy with information on results of its use.

Methadon Superior

Best drug so far, for the relief of pain in dying cancer patients is the synthetic drug, methadon, known also as amidone and dolophin.

Its superiority among a group of four new pain-killing drugs tested at Memorial Hospital was reported by Dr. J. S. LaDue at the same conference.

The other three drugs tested were two known only as NU 896 and NU 1196 and metopon.

Methadon is superior in some respects to the opiates, which include morphine itself, Dr. LaDue reported. One of its advantages is that it does not produce euphoria, or a feeling of well-being, except in very large doses. Small doses of opiates uniformly produce euphoria.

For nervous, apprehensive patients, however, the lack of euphoria is a disadvantage.

Methadon, which is definitely a narcotic drug, is just about ready for release, Dr. LaDue said.

A dozen or more new pain-killing drugs are still waiting to be tested. The Memorial group expects to try these as soon as possible in the hope of finding the ideal pain-killer for cancer patients.

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AERONAUTICS

Afterburner Adds Speed

➤ A RAM-JET-LIKE device called an afterburner, which is attached on the exhaust of a jet-engined airplane to give special spurt when needed, will be installed on Navy Pirate fighting planes, it was revealed by Solar Aircraft Company. Under present plans many of the Navy's Chance Vought XF6U-1 Pirate fighters will be equipped with this auxiliary jet unit.

The afterburner being installed is a cylindrical device eight feet long which is attached on the exhaust nozzle of the Westinghouse turbo-jet engine which powers this plane. Fuel is injected into the cylinder into the gases from the turbo-jet engines, which contain a surplus of oxygen. Combustion immediately takes place, and the gases formed under pressure add extra thrust which increases proportionately with the speed of the aircraft.

The ram-jet has been called the flying stovepipe because of its simple shape. It operates somewhat similarly to the turbo-jet but has no turbines or moving

AFTERBURNER—This cylindrical device on the rear will be installed on Navy Pirate fighting planes.