

MEDICINE

Pain Tests for Drugs

New drugs should be accurately and scientifically tested by the patient and their effects on him judged in the sickroom, not in the laboratory, doctor urges.

► THE PLACE for tests of new pain-relieving drugs is on the sickbed of the patient in pain and not in the dispassionate and unemotional atmosphere of a laboratory, Dr. Henry K. Beecher of Harvard Medical School and Massachusetts General Hospital, Boston, declared in *Science* (Aug. 15).

There is a fundamental difference, he said, in what can be learned in studying "natural" pain caused by disease or a wound and the kind of pain produced to order by pin pricks, electric shocks or heat on the forehead. An investigator familiar with the laboratory method of studying pain was unable to tell by this method the difference between the effect of 15 milligrams of morphine and a normal salt solution when he did not know which injection the subject had received.

Accurate, scientific and quantitative methods for testing new drugs for their effects on such experiences as pain, relaxation, warm glow, sensation of drunkenness, light head, heavy head, dizziness, ringing ears and nausea were urged by Dr. Beecher.

It is tedious to make such tests, he said. But it is even more time-consuming and costly to distribute the drugs to practically everybody and find out, perhaps only after centuries of use, something about what they do. After all the centuries that morphine has been used, he pointed out, "common sense" arrived at a dose of 15 milligrams which is just double the amount actually needed to give the best relief of pain.

To test the effects of a new drug, it should be first demonstrated that the drug is safe to use, not poisonous. Then it should be tried out in comparison with a standard such as morphine in standardized dosage and with a placebo. A placebo is a dummy dose containing no drug. Each of these should be sandwiched between two doses of another and given in completely ran-

dom order. The observers as well as the patient should be kept ignorant of what the doses contain.

Allowance must be made, Dr. Beecher stresses, for the fact that some persons are helped by the placebo, and it is a mistake, he believes, to consider these persons either malingerers or neurotics. Placebos can cure in some cases and can block pain in normal individuals. This effect must be screened out by mathematical procedures.

The investigator or team of investigators must be kept constant during an entire series of experiments. It has been found, for example, that a sympathetic woman investigator generally obtains a higher percentage of pain relief from various medicines than does a colder, more remote, male.

Men, however, make better subjects than do women because of the unpredictable effects of the menstrual cycle.

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PUBLIC HEALTH

Protect From Poisoning

► AS LONG as parents are careless and children are inquisitive there will be accidental poisonings, declares Dr. J. P. Price of Florence, S. C., in a report to GP, journal of the American Academy of General Practice.

Since children learn through being inquisitive and curious, it is up to the parents to check their own carelessness if they want to prevent accidental poisoning of their children.

A few of the lessons Dr. Price says all parents should learn include:

1. Keeping all medicine in a special place out of reach of the child.
2. Discarding all bottles and cardboard boxes in which small amounts of old medicine remain.
3. Avoiding the use of soft drink bottles or small glass jars for holding solutions which are harmful if drunk.
4. Guarding against a child coming close to a can or bottle of cleaning liquid or polish which is being used.
5. Keeping the child away from any shrubs or plants which have been sprayed recently.
6. Keeping all insecticides and animal poisons in the garage or barn and never bringing them into the home.
7. Teaching the child the danger of eating the leaves or seeds of growing plants.

But should you have to make a frantic call, "Doctor, what shall I do? Little Mary

Questions

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SIZE AND SURVIVAL

Which has survived most successfully, the bison or the boll weevil? You know the answer. Smallness often implies adaptability. The cells of a developing organism get smaller as growth proceeds: differentiation, specialization, adaptation.

Because we are a small company, we are adaptable. We can afford to experiment.

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THE AGERSBORG BIOLOGICAL LABORATORY
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AGRICULTURE

About 600 Groups of Grasses Now Known

► THERE ARE about 600 groups, or genera, of grasses and about 5,870 species so far known. This was reported by Drs. Valentin Sajor and Teofilo S. Santos of the Department of Agriculture and Natural Resources, Republic of the Philippines, to the Sixth International Grassland Congress. Grasses, they said, are the most important of the plant families because of their economic uses and possibilities as sources of food, forage, medicine, raw products for household and handicraft articles, furniture and construction materials.

One recent use for a Philippine grass, they pointed out, is woven bamboo for plane construction.

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