

MEDICINE

Tests Urged Before Shots

A standard method is urged to test for penicillin allergy. It will take at least five years to find out if special diets really can prevent heart attacks.

THE NEXT TIME your doctor decides you need penicillin, do not be surprised if he brings in an oxygen tank, a tourniquet and a bottle of epinephrine. He may even send you to a hospital.

Dr. Alexander A. Fisher of Woodside, Long Island, N. Y., reported to the American Medical Association meeting in Miami, Fla., that many doctors are urging that allergy tests be made before penicillin is given because so many persons are developing sensitivity to the drug.

In a poll of 50 general practitioners and allergy specialists in the New York area, Dr. Fisher found that some had stopped prescribing penicillin because it had brought on fatal anaphylaxis, a shock-like reaction in which the body tries to reject the foreign substance. Others were making tests before giving shots, but were unsure of just what technique and how much precaution to use.

Noting the confusion over how to test for this allergy, Dr. Fisher suggested a standard method, to be used before each and every penicillin injection.

For patients who have never had a reaction, a skin-scratch test should be given. The solution to be rubbed into the scratch should be from the same bottle as the injection dose, because specially prepared test solutions may deteriorate on the shelf and will not give a true result. A control scratch with normal saline rubbed in should be made at the same time.

If the patient is allergic, a positive reaction will show up in 15 minutes, usually in the form of a wheal (hives) at site of the scratch. If generalized itching, difficulty of breathing or general wheals appear, the tourniquet is applied and epinephrine is injected under the skin. If the scratch test is negative—one-tenth of the full dose is injected, and after a few minutes, the remainder is given.

For patients who may have had a previous reaction, the skin-scratch test is made with dilute penicillin. If it is negative, a second test is made by injecting a small amount not under, but into, the skin. This should be done only if equipment for shock treatment such as an oxygen mask, is available.

For patients who have had a reaction, tests should be made only in a hospital where full shock treatment, including facilities for making a substitute opening in the windpipe, is available.

An intravenous drip would be started before testing begins since, in cases of severe and rapid reaction, the time required to find a patient's vein and insert a needle for antishock treatment may be crucial. Such persons would be tested and given penicillin only if the illness was serious and when no other medication would do.

Dr. Fisher said the same tests should be made before giving penicillin pills, ointments or sprays. He emphasized the need for caution at every step of testing because severe or fatal reactions have occurred after negative skin tests.

He also noted that anaphylaxis can occur even if penicillin was well tolerated previously. "A negative skin test is valueless unless obtained immediately before each injection," he said.

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Cholesterol Discussed

IT WILL TAKE at least five or ten years to find out whether diets aimed at lowering blood serum cholesterol really can prevent heart attacks, doctors at the annual meeting of the American Medical Association in Miami Beach, Fla., were told.

Dr. Grace A. Goldsmith, professor of medicine at the Tulane University School of Medicine, told colleagues the idea that dietary fat causes increased cholesterol levels, hardening of the arteries and coronary artery disease is no longer so simple as it appeared a few years ago.

"In our ignorance," she said, "many doctors believed that this relationship was true, but it has not been proven."



BRAIN MODEL—This functional brain model demonstrates how sensory stimuli—sight and sound—are used to create thought, in this case of a singer's voice. Developed for the Upjohn Company, Kalamazoo, Mich., the "brain" was shown at the American Medical Association meeting in Miami, Fla.

Cholesterol is only one of the serum lipids (fats) that might be related to artery-hardening in some way. No one knows just what the function of cholesterol or the other lipids is.

Some researchers believe the level of other substances, the triglycerides, is more important than that of cholesterol. One reason is that the concentration of triglycerides is higher in the serum of patients with coronary artery disease than in other persons.

Dr. Goldsmith also pointed out that the normal level of cholesterol and other serum lipids is not known. Nor does anyone know just how cholesterol is regulated and balanced in the human body.

No one has pinpointed the mechanism by which blood is cleared of cholesterol. Nor is there an answer to how diets with unsaturated fats—usually those that are liquid at room temperature—reduce cholesterol levels.

In addition to unraveling the already complex tangle of questions and answers, researchers must take on the task of substantiating or disproving a new theory.

This is that dietary fat affects blood coagulation and makes it easier for clots to form, thus increasing the chance of plugged-up blood vessels and heart attacks.

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Ulcer No Cause for Fear

STOMACH ULCERS are no cause for alarm, Dr. William H. Bachrach of Los Angeles told the annual meeting of the American Medical Association in Miami Beach, Fla. He said he is opposed to the philosophy that anybody with a gastric ulcer should be operated upon in order to be sure they do not have cancer.

The morbidity and mortality of operation for gastric ulcers exceed the risk that a benign looking ulcer will prove to be malignant, he said. Careful use of radiological data makes possible an accurate diagnosis of gastric ulcer in a high percentage of cases, and the application of a therapeutic test makes possible the diagnosis in almost all of the remaining cases.

"While there are many cases of gastric ulcer in which the radiological appearance is such that the criteria cannot be immediately applied, the probability of a benign ulcer is such that it is worth a further X-ray examination after a period of intensive medical management," he said.

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Fair Winners Honored

TWO NATIONAL Science Fair-International winners were among the hundreds of exhibitors at the annual meeting of the American Medical Association in Miami Beach, Fla. Brenda W. Lisle, 16, of Chattanooga, Tenn., and Philip C. Brockman, 18, of Grand Rapids, Mich., were honored as a result of their exhibits being chosen by a special AMA judging committee last month in Indianapolis. The AMA's interest in the National Science Fair is to enlist talented high school and college students in careers in medicine.

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