

MEDICINE

Test For Rheumatic Ills

➤ A SHARP DROP in the 19,000 annual deaths from rheumatic fever and rheumatic heart disease is possible as a result of tests now available.

The pediatrician or family doctor who is not sure his patient with a sore throat needs antibiotics to kill any possible streptococcus germs can now send a swab to a laboratory and receive a telephoned report in three hours.

An exhibit at the 30th annual meeting of the American Academy of Pediatrics in Chicago showed how quick the tests work.

Dr. Martin E. Levy of the U. S. Public Health Service said that swabs sent to a laboratory are put in broth culture for two hours, after which the technicians make a smear to put on a glass slide.

The smear is stained with fluorescent antibodies. If the germs believed to cause rheumatic fever are present, they will glow under a microscope adapted with ultraviolet light.

Chicago has just begun a system of mailing throat kits that can carry swabs to some 40 laboratories in the city. Not all laboratories are equipped to use the new fluorescent antibody method, but the Chicago Board of Health Laboratory and some of the hospital and commercial laboratories are using it.

Dr. Levy told SCIENCE SERVICE that the Public Health Service has made the fluorescent test available to every state and terri-

tory of the U. S. and has trained at least one technician who can train others in the technique.

Connecticut, Iowa, Texas, Wisconsin, California, Colorado, Wyoming, New York and North Carolina have active state programs. Chicago is the only city with a comprehensive program.

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Needless Operations

➤ TOO MANY needless operations have been performed to remove limbs of frostbite victims, an Alaskan surgeon told the 47th annual clinical congress of the American College of Surgeons in Chicago.

Dr. William J. Mills of Anchorage, Alaska, said that rapid rewarming in water or, if possible, in a whirlpool bath can save limbs. The required temperature is a painful 110 to 118 degrees Fahrenheit.

Dr. Mills and his co-workers have successfully treated some 60 frostbite victims in Alaska. He said the rapid rewarming should be followed by "open treatment" without ointment or salve.

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Heart Transplanted

➤ A TECHNIQUE to transplant the heart in dogs was reported at the 47th annual

clinical congress of the American College of Surgeons in Chicago.

Dr. Peter Hairston of the University of Virginia School of Medicine, Charlottesville, Va., said the technique he had developed enabled investigators to observe and record survival characteristics.

The dog is maintained on a heart-lung machine while his heart is removed and replaced by the transplanted organ. The experiment was performed 23 times, with 22 of the transplants surviving one to eight hours. All transplanted hearts showed a relatively normal electrocardiogram at one time.

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Child Poisoning Common

➤ POISONING is the commonest medical emergency, aside from mechanical accidents, treated in a pediatrician's office.

Dr. Edward Press, health director of Evanston, Ill., and chairman of the first organized poison control center in the United States, said there are more than 300,000 "episodes" of poisoning among young children in this country every year.

Between 400 and 500 children die each year from poisonous solids and liquids. Around 80 of the children die from drinking kerosene or some petroleum distillate such as lighter fluid.

Dr. Press attended the fourth annual meeting of the American Association of Poison Control Centers in Chicago. He received a gold medal from the American Academy of Pediatrics for outstanding service to the professional society dedicated exclusively to the improvement of child health and welfare.

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ROENTGENOLOGY

Unnecessary Amputation Avoided by X-Ray Use

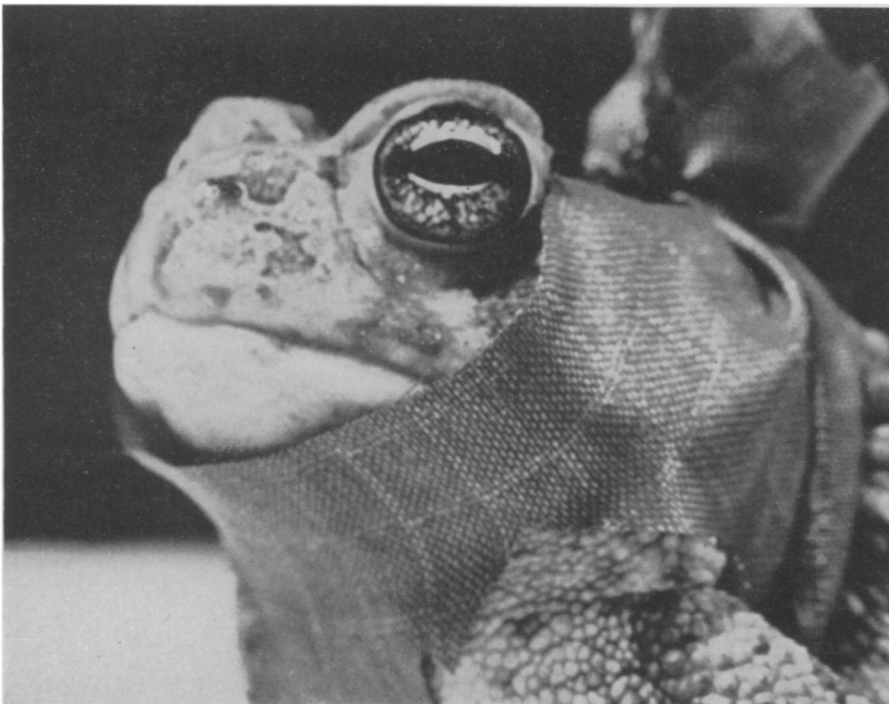
➤ UNNECESSARY amputation of legs and arms can be avoided by using a combination of X-rays and laboratory studies to differentiate benign bone tumor from bone cancer.

Drs. Bernard Turcotte, David G. Pugh and David C. Dahlin of the Mayo Clinic in Rochester, Minn., reported to the American Roentgen Ray Society in Miami Beach, Fla., that the tumor called chondromyxoid fibroma can be distinguished from the more serious and cancerous condition chondrosarcoma.

The spread of cancers in the neck and head through nerve fibers along nerve canals can be detected by X-ray studies, according to Drs. Gerald D. Dodd, Patrick A. Dolan and Alando J. Ballantyne at the M. D. Anderson Hospital and Tumor Clinic at Houston, Texas.

Cancer cells push among nerve cells but cannot invade them, and the nerve continues its normal function. Since there is no pain or clinical symptoms, it is difficult to detect the cancer invasion.

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WIRED TOAD—The garment of silvered cloth wires the toad to electric devices for research on survival of the heart with low oxygen supply. The project for finding ways of preventing heart failure is being undertaken by Indiana University, Bloomington, Ind., under a grant from the U. S. Public Health Service.