

Freeze Tumors to Death

Bone devitalization by freezing, which has been successful on animals may be a valuable method of treating oral cancers in humans

► **FREEZING** of bone tumors as well as soft tissue cancer in the oral cavity, may be practical for humans, animal tests indicate.

The freezing technique known as cryotherapy has been successful with dogs, Dr. F. G. Emmings of Buffalo, N.Y., told the 44th general meeting of the International Association for Dental Research (IADR).

In treating soft tissue tumors lying next to bone, rubber tubing and liquid nitrogen were used as a refrigerator coil, freezing and thus devitalizing bone segments without removing them from the animal's body.

A healing process began in the vital bone adjacent to the frozen segment, Dr. Emmings observed through X-ray and microscopic studies. The entire nonvital part was covered by new, immature bone in two months, and by the end of six months, the process of reabsorption and replacement was half completed.

The absence of any ill effects from bone devitalization suggested that primary bone tumors might be treated without surgery by freezing.

Dr. Emmings is associated with the Veterans Administration Hospital in Buffalo, and with the State University of New York in that city.

In answer to recent proposals for restrictive laboratory animal legislation, Dr. Barnett Levy of Houston, Texas, outgoing president of the IADR, said experiments with animals are an "absolute necessity in fighting oral disease."

He pointed out that many of the more than 500 papers to be presented at the meeting provide dramatic proof of the important role the laboratory animal plays in dental research.

Scientists support sensible animal care legislation, he said, but oppose any measure that would interfere with beneficial research.

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Sound Waves Diagnose Abnormal Blood Vessels

► **HIGH-FREQUENCY** sound waves have been used with encouraging results in diagnosing abnormalities in blood vessels.

The method is especially valuable in examining patients whose general condition does not permit prolonged X-ray examination.

Dr. Bernard J. Ostrum, radiologist at the Albert Einstein Medical Center, which sponsored a symposium on vascular disease, said the Center has begun using ultrasonic angiography as a screening test for certain types of vascular disease in elderly patients. The method determines the thickness of blood vessel walls and the size of the opening within the vessel.

The most common vascular disease is a type of hardening of the arteries called atherosclerosis in which hard deposits form within the artery. These can either block the passage of blood by reducing the size of the opening within the vessel, or they can weaken the arterial wall so that it balloons and forms an aneurysm.

The equipment used by Dr. Ostrum and his associates produces sound waves at a frequency of about two megacycles per second, well above the upper frequency limit of human hearing. Echoes, reflected back from body tissue, register as an image on an oscilloscope, and the image is photographed for a permanent record.

Dr. Ostrum reported on recent studies at the Center with 32 patients, 20 of them "normal" and 12 with aneurysms that had been corrected surgically. When possible, ultrasonic findings were correlated with X-ray findings and observations during surgery. But in some cases, ultrasonic angiography was the only conclusive study that could be made.

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Measles Vaccine Taken To Indian Dance Festival

► **AN INDIAN** dance festival at Aneth, Utah, gave Public Health Service doctors and nurses a chance for measles control.

Needleless hypospray vaccination guns filled with one-shot Schwarz-strain, or Lirugen, vaccine were offered to children of dancers and spectators who find it inconvenient to make trips to clinics.

Other tribal festivals and Indian chapter house gatherings will also give opportunities to doctors to cut down the measles rate among the 25,000 Indians who live in the northeastern sector of the largest reservation.

The physician in charge of the measles program is Dr. Johanna Dietz, of Navajo descent.

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