MEDICINE

Esophagus Cancer Test

Tumors are detected with ultraviolet light in a test for cancer of the esophagus. Beards will protect against the sun, and all bites should have rabies treatment, doctors report.

AN EASY WAY to detect cancer of the esophagus, or gullet, has been reported.

Dr. Herman J. Moersch of Rochester, Minn., director of education and research, American College of Chest Physicians, told the Illinois State Medical Society annual meeting in Chicago:

"Hematoporphyrin, a derivative of hemoglobin—the oxygen-carrying red pigment of the red blood corpuscles—if injected into the blood stream, will accumulate in the tumor.

"When esophagoscopic examination is done with the use of ultraviolet light, the tumor presents a very striking iridescent light which can be very easily detected."

Early diagnosis, Dr. Moersch explained, is necessary for successful treatment of carcinoma of the esophagus. The disease frequently progresses too far for operation before it produces obvious symptoms.

Patients tend to overlook the earliest symptom, which is difficulty in swallowing a large mass of food. By avoiding the larger particles and chewing food more thoroughly, they get rid of the difficulty. It is often impossible to operate by the time they have further trouble and go to their doctors.

Surgery and X-ray treatment are the two most reliable methods of treating cancer of the esophagus. Dr. Moersch said some spectacular results have been obtained in certain cases by use of the cobalt bomb and roentgen therapy. He said it is hard to select the cases that will respond to this therapy.

Only half of the patients seeking medical care for this disease can be operated. Of these, 60% have successful operations, and it is estimated that about 17% will live five years or more.

Science News Letter, June 4, 1960

Advises Beards

Dr. Hans M. Buley, director of the Christie Clinic, Champaign, Ill., speaking also at the annual meeting of the Illinois State Medical Society in Chicago, advised

X-RAYS ON TV—Television monitor set shows Walter Ciceric of Johns Hopkins University a side view of abdomen of patient lying on the table. X-rays, converted into light rays, are intensified 50,000 times.

farmers to grow beards, if necessary, to protect themselves against the harmful effects of the sun.

Pointing out the dangers of solar radiation, he said protection is needed especially during the middle of the day. He advised light clothing to cover the arms and neck as well as wearing a hat when riding a tractor or combine.

Science News Letter, June 4, 1960

Warns of Rabies Danger

EVERY BITE by a domestic or wild animal should have emergency first aid treatment for rabies, Dr. Karl Habel, chief of the laboratory of biology of viruses at National Institutes of Health in Bethesda, Md., told the Illinois State Medical Society meeting in Chicago.

He said every bite raises the question of possible exposure to rabies.

"The immediate mechanical washing out of the bite wound with encouragement of bleeding tends to remove any rabies virus," he said, advising the use of soap and water.

Whether antirabies serum is given depends on the health of the biting animal. If the animals cannot be found, if the animals are wild (bats are especially dangerous), or if children get severe bites in localities where rabies is prevalent, vaccine is recommended.

Science News Letter, June 4, 1960

MEDICINE

TV Technique Used In X-Ray Fluoroscopy

A PATIENT can now watch his own X-ray fluoroscopy examination if he wishes. A new technique also makes it possible for teams of consulting doctors and medical students to view diagnostic images on a television-like screen.

Dr. Russell H. Morgan, professor of radiology at The Johns Hopkins University, Baltimore, Md., predicted that the new equipment will be used increasingly in all hospitals, large and small, in the future.

Speaking at the second of a series of X-ray forums for science writers sponsored by the American College of Radiology, Dr. Morgan said less radiation was needed for cinefluorography or X-ray motion pictures with the new system.

The Johns Hopkins method, which converts X-rays to light rays and displays them on a fluoroscopic screen, is one of four systems investigated for X-ray image intensification. Dr. Morgan said it is the one of greatest interest in the United States today.

Other methods include television systems optically coupled to conventional fluoroscopic screens, "flying spot" television and television systems with X-ray sensitive detection tubes.

One advantage of the TV method is that examinations do not have to be made in a totally blacked-out room. This is easier on the eyes and saves the time required for adapting the eyes to darkness.

Science News Letter, June 4, 1960