

MEDICINE

Clue to Lung Cancer

► RHEUMATIC ACHES and pains in the joints and long bones with swelling of the finger and toe joints may provide an important clue for early diagnosis of lung cancer.

Five cases of lung cancer in which these symptoms were the first significant ones and a sixth case in which these symptoms were present are reported by Drs. John D. Pattison, Jr., of Toledo, Ohio, and Drs. Erwin Beck and William B. Miller of Pittsburgh in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (June 30). Five of the patients were seen at the Veterans Administration Hospital at Aspinwall, Pa.

The symptoms are part of a disease called hypertrophic osteoarthropathy. It almost always is secondary to an acute or chronic disease of the lungs or other internal organs.

The disease often is mistaken for rheumatoid arthritis. Many patients with lung cancer have been treated for many months as arthritics before a chest X-ray revealed the lung condition, Dr. Pattison and associates point out.

They stress that the rheumatism-like symptoms usually appear long enough before lung symptoms to allow successful removal of the cancer. The aches and pains in hands and feet clear up with dramatic speed after the cancer has been removed.

The enlargement of the hands and feet in some of these cases make them look something like persons suffering from the pituitary gland disease, acromegaly.

Persistent hoarseness and cough are other symptoms of early lung cancer which should not be ignored. The rheumatic disease gives doctors one more early signal.

Science News Letter, July 21, 1951

BIOPHYSICS

Sense of Smell Baffles

► SCIENCE IS not yet sure how you smell a rose, a broiling beefsteak, your girl's favorite perfume or any other odor.

Tests reported in Los Angeles call in question the heat absorption theory of sense of smell put forth in 1947 by Drs. Walter R. Miles and Lloyd H. Beck, Yale University psychologists.

The Miles-Beck theory says that the substance producing the odor gives off a gas that absorbs infrared or heat radiation of certain wavelengths given off within the nose. This loss of heat detected in the nose's olfactory sense organ is signaled to the brain and interpreted as the sensation of odor. They did their original work on bees. Earlier theory held that odor is a chemical sense, aromatic particles hitting

the nose and going into solution on its moist inside lining.

Now Drs. A. Theodore Forrester and Wm. E. Parkins of the physics department at University of Southern California have set up tests that they feel do not support the infrared theory. Odor-containing air kept at constant temperature of the body and breathed by a person still produced the sensation of odor, whereas the experimenters suggest under the Miles-Beck theory this should not be the case.

Such tests are not considered conclusive, and they suggest a further test of the theory by inserting into the nasal passages a sealed tube of odorous gas in a container transparent to the heat rays that are supposed to be absorbed to produce the odor effect.

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MEDICINE

75 Have Frostbite Damage

► ONLY 75 of the 2,500 men who suffered frostbite during the withdrawal from Chosen Reservoir in Korea last winter lost any toes or, in medical terms, "had any permanent loss of substance."

These figures were announced by Capt. E. R. Hering, of the Navy Medical Corps, at the meeting of the American Medical Association in Atlantic City, N. J.

Capt. Hering contradicted some of the reports on frostbite during the "dramatic and bloody withdrawal from the Chosen Reservoir" last winter.

"We had good clothing in sufficient quantity and the men had been indoctrinated, although they were not trained Arctic troops by any means. But the very nature of that fight," he declared, "made it impossible for the troops to take all precautions. Men would struggle up the steep hills to drive out the Chinese and protect the column of vehicles. Their feet would perspire and then they would be pinned down and the sweat would turn to ice. They had no facilities for drying socks and even changing them must have been

difficult. Men arrived in Hogaru with a shell of ice around their feet inside their boots."

The criteria for deciding which cases would be evacuated and which would fight their way back with their comrades, when every man capable of bearing a rifle was needed, were the feet of the Fifth Regimental Surgeon. He refused to be evacuated, although he could not walk without great pain, but instead insisted on riding in an ambulance with his medical section. The men with feet worse than his were evacuated, Capt. Hering personally passing on all controversial cases.

Science News Letter, July 21, 1951

● RADIO

Saturday, July 28, 1951, 3:15-3:30 p.m. EDT

"Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Robert R. Williams, a chemist widely known for his synthesis of vitamin B₁₂, and assistant to the president of the Research Corporation, will discuss "Enriching Rice for World Health."

INVENTION

Portable Drink Dispenser Ends Empty Bottle Menace

► UMPIRES AT ball games may welcome a portable "drink" dispensing device, which received a patent from the government, in which the beverage is carried in bulk and sold by the cup instead of by the bottle.

It consists of a double-walled tank that is worn on the back of the salesman. The inner section holds the beverage. Between the two walls, cold air circulates. Solid carbon dioxide, so-called dry ice, is used to chill the circulating air and consequently the beverage.

The inventor is Art Kassel, Van Nuys, Calif. Patent 2,558,181 was awarded to him.

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