medical sciences

CANCER

Tumors release a fatal substance

Why do some cancer patients die although their vital organs are apparently undamaged? Only until their malignant tumors have reached their greatest growth and begin to die, do these persons waste away.

From the Karolinksa Hospital in Stockholm comes a report that malignant tumors may produce a substance

that inhibits the growth of normal cells.

Dr. Bo Holmberg, a physiologist, and his co-workers in the Cancer Division of the Radium Clinic at Karolinska, have isolated and purified a specific, active type of ordinarily harmless polypeptide, contained in tumor fluids, which is transported to various parts of the body by the blood and other body fluids. It is a cell-growth-inhibiting substance that may stop the formation of red corpuscles and disturb the formation of the intestinal lining.

When the Swedish researchers combined the substance with normal cells in a test tube, the cells died.

Dr. Holmberg says that both British and Russian investigators have confirmed these findings.

HERBS

Cirrhosis in Arab children

Home remedies given to Arab children for relief of constipation or minor upsets consist of herbs that can affect their liver, Hadassah-Hebrew University Medical Center doctors have discovered.

Dr. Alexander Russell, head of the pediatrics department, and his co-workers have been examining numbers of these children and have found an unusual condition that rarely occurs except in adults—cirrhosis of the liver.

An Arab-speaking member of the pediatrics staff who surveyed several villages found nothing in the regular diet to cause liver trouble, but he did find that three of 24 herbs being administered innocently by the mothers are toxic to the liver.

The pediatricians are now waging an educational campaign in behalf of less injurious laxatives. They agree with the people that the leaves of digitalis, or foxglove, may be good for heart conditions, but they explain that there is great danger in the indiscriminate use of such home remedies if they are not backed by scientific investigation.

GONORRHEA

Oral drug works in tests

Although penicillin remains the drug of choice in treating gonorrhea, there are people who are allergic to the antibiotic, and some strains of the disease that are resistant to it.

The National Communicable Disease Center in Atlanta, Ga., reports that trials of a single dose of tetracycline derivative, called doxycycline monohydrate, have been successful in 95.3 percent of 169 males treated by NCDC doctors.

Other tetracycline derivatives, and tetracycline itself, have been successful in curing gonorrhea, but because some people have gastrointestinal upsets when they are

238/science news/vol. 95/8 march 1969

given doses large enough to be effective, the venereal disease workers continue to test drugs.

It has been estimated that 1.5 million new cases of gonorrhea occur each year in the United States.

The NCDC report on doxycycline monohydrate is published in the February Public Health Reports.

BONE SURGERY

Compression nail shortens hospitalization

A new surgical technique for broken bones is reported from the surgical clinic of Göttingen University in West Germany. Clinical testing indicates that it may shorten hospital stays, even for elderly patients, who can sometimes move a broken arm or leg in as little as five days after surgery.

Drs. Hans-Jürgen Kässmann and Hans-Georg Weber have developed a compression nail, which they say is an improvement over the marrow nail developed in Ger-

many in 1941.

The new device fits inside the marrow cavity and acts as an interior splint. Pressure of up to 160 pounds is used to pull the bone fragments together.

Orthopedists in the United States say work is being done experimentally on this technique, but they are using a compression plate which has lasted five years.

The plate is used on the outside of the arms or legs, and is applied with screws to the cortex of the bone. It ranges from three to eight inches in size.

BRONCHITIS

Experimental spray improves breathing

A mucus-dissolving drug given in a fine mist to 20 patients with chronic bronchitis or emphysema in the Brooklyn, N.Y., Veterans Administration Hospital has improved their breathing without unfavorable reactions, Dr. Mauricio J. Dulfano and Paul Glass report.

The aerosol agent is called oxymix, and contains ascorbic acid, sodium percarbonate and copper sulfate that break down mucus and increase the volume of breathing to relieve patients.

"The improvement in ventilatory function observed during the oxymix administration deserves particular mention," the researchers say in the Feb. 17 issue of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

CATNIP

Contented as cats, smokers say

Now they are going to pet stores to get their smoking kicks. Catnip, or cataria, used by cat owners to please their pets, is giving effects that are somewhat similar to LSD, two Wisconsin psychiatrists say.

In an article on catnip and the alteration of consciousness in the Feb. 17 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, Drs. Basil Jackson and Alan Reed say they have found no previous mention of the psychopharmacological effects of this drug.

Catnip, Nepeta cataria, is a plant of the mint family that was formerly used in a tea form for women lacking iron and babies with colic. Four cases are described, three of them without side effects.