

Medical Sciences Notes

CANCER

New search for human cancer virus

A new research effort using blood serum and tissue from 500 cancer patients has been launched to find out whether common viruses can cause human cancer. The verdict could come within a year, says Dr. Robert J. Huebner, chief of the laboratory of viral diseases at the National Institutes of Health.

An encouraging development has been the discovery that certain adenoviruses common to most persons and responsible for a range of human respiratory diseases, will cause cancer in rat cells (SN: 10/14), although up to now they have been considered noncancer-causing.

Among cancer-treatment centers that will aid in the cancer virus search are those in St. Louis, Cleveland, Houston and San Francisco, Dr. Huebner said. They are looking for tumor antigens, which viruses have left in animal research, and which they hope to find in human cancer specimens. First target: antibodies to the t-antigens.

HEMATOLOGY

Unique blood type

A 20-year-old soldier who might now be fighting in Vietnam has been given a permanent assignment to Ft. Devens, Mass., as a personnel clerk, because his blood is almost unique.

Dr. Lyndall Molthan, director of Temple University Hospital's blood bank in Philadelphia, explains that instead of being blood group "O" as the Army had thought, the blood the soldier donated was found to be so rare that he is stock-piling his own blood for freezing in case he ever needs a transfusion. He has an A-h type of Bombay blood found in only one person before—a Czechoslovakian nurse.

DIPHTHERIA

Immunization follows outbreak

Two little girls, aged one and seven, died in Alabama recently because they had never been given diphtheria toxoid. Twelve other children from one to 12 years of age got this preventable disease in the state, 11 of them in Dallas County, where the Health Department has now immunized 21,000 persons. The cases occurred from Aug. 4 to Oct. 11.

Intensive immunization campaigns are now being carried on in adjoining counties where 42 carriers were found.

The State Department of Health provided the information in the Public Health Service's MORBIDITY AND MORTALITY REPORT for the week ending Oct. 14.

INFECTION

Lab workers get Rocky Mountain fever

Five laboratory workers at Fort Detrick, Frederick, Md., have had severe bouts of Rocky Mountain spotted fever acquired at their work. Only one was actually bitten by an infected tick—the common mode of transmission.

Although the disease is potentially serious, the use of antibiotics in recent years has lowered the death rate,

which at one time ran as high as 80 percent of unvaccinated adults.

Two cases began when puncture wounds accidentally injected organisms with which the technicians were working. The two others are believed to have been caused by contamination in the air. All five persons were ill about a month before returning to work. Four of the five had been vaccinated, which made their cases less dangerous than the one without immunization.

Dr. Joseph E. Johnson III, chief, Medical Investigation Division, Department of the Army, Fort Detrick, and Dr. Paul J. Kadull, formerly of Johns Hopkins University, report the cases in the Oct. 19 issue of THE NEW ENGLAND JOURNAL OF MEDICINE. Dr. Kadull is now on the staff of the University of Florida College of Medicine, Gainesville.

INFLUENZA

Healthy children don't need shots

Only children whose physical condition points to serious effects from flu should receive vaccine, the American Academy of Pediatrics advises. This is in spite of Public Health Service predictions of Asian flu outbreaks during the coming winter.

Many children have feverish or other types of reaction from currently available vaccines, the Academy says.

Those who should get shots include children with:

- Rheumatic heart disease, especially those with shrinking of the mitral valve, or with other cardiovascular disorders;
- Chronic broncho-pulmonary diseases, including cystic fibrosis of the pancreas, chronic asthma, bronchitis, bronchiectasis or pulmonary tuberculosis;
- Weak or paralyzed respiratory muscles;
- Chronic metabolic disease, diseases of the kidney and neurologic disorders.

Amantadine, a drug for preventing Asian flu, is not recommended for children by the Academy.

POLLUTION EFFECTS

Contaminated ice causes illness

Nearly 1,000 students at a West Virginia University football game were made ill by ice made from contaminated water, Dr. N. H. Dyer, State Health Department director, reports.

It was a special day for high school students, so in addition to more than 700 university students who had symptoms, an unknown number of younger people were affected. Cola syrups in which the ice was used were not implicated and a survey of foods eaten exonerated them.

"We ruled out any possibility of the ice becoming contaminated by handlers," Dr. Dyer said, "because there was a supply of unused ice from the delivery service that we were able to test."

The ice manufacturing plant—carefully unnamed—is being investigated, although there have been no reports from other customers of stomach and intestinal inflammation.

Students flocked by the hundreds to the medical center complaining of nausea, vomiting, diarrhea, mild fever, dizziness, headache and fainting. There were no deaths but 42 had to be hospitalized.

A high count of the intestinal bacterium *Escherichia coli* was found in the ice.