

# medical sciences notes

## LUNG CANCER

### Grim odds for survival

The blackness of the outlook for lung cancer victims has never been presented to the American public adequately, according to Dr. Bernard Roswit, chief of the Radiation Center of the Veterans Administration Hospital in the Bronx, N.Y.

This year, he points out, some 61,000 Americans will contract lung cancer. Close to 75 percent of them will be dead within one year; 93 percent within five years.

In the July issue of *HOSPITAL PRACTICE*, Dr. Roswit says that advances in radiotherapy, while impressive, are unlikely to alter greatly the gloomy prognosis resulting from the stalemate in efforts against cigarette smoking.

Out of 100 lung cancer patients initially examined by a physician, he says 50 to 60 will already be beyond the chance for cure because their disease has extended beyond surgical help.

Of the 40 to 50 remaining, only half can be operated upon. Of the 20 to 25 with operable growths, only five to eight will be alive five years after surgery.

Even then the patient is not safe, as a recent study indicates that 23 percent will have a recurrence.

Of the various radiation treatments, the most promising seems to be neutron beams.

## TRANSPLANTS

### RNA controls rejection

Hope for freeing transplant patients from daily doses of rejection-inhibiting drugs ordinarily required the rest of their lives is held out through the use of ribonucleic acid, or RNA, a genetic constituent of every animal cell.

Medical research scientists at Loma Linda University, Loma Linda, Calif., will continue their work along these lines under a \$269,995 grant from the John A. Hartford Foundation of New York City, seeking to find out more clearly how RNA prevents rejections.

Basically, the procedure developed at Loma Linda calls for soaking the organ or tissue in an RNA solution before it is implanted. Surgeons at the University of Colorado have reported doubling the survival time of transplanted kidneys and livers in animals, using the Loma Linda procedure without the usual immunosuppressive drugs.

Several severely burned human patients have received transplanted skin from unrelated donors using the RNA process. Follow-up studies show the transplants have been permanently successful with the patients free from immunosuppressive drugs and their side effects.

Heading the Loma Linda research team are Dr. David B. Hinshaw, dean of the university school of medicine, and Dr. Weldon B. Jolley, associate professor of physiology and biophysics.

## PLAGUE

### Denver girl recovers

A six-year-old girl has recovered from bubonic plague in Denver, the first case reported in the United States this year. The infection was attributed to fleas from squir-

rels near her home in the east central part of the city. She was treated with antibiotics.

Public health officials are guarding against spread of the caustive organism, *Pasteurella pestis* (found in 27 Eastern Fox squirrels in Denver in laboratory tests of 123 dead animals) by placing boxes of DDT in trees along with food to attract the squirrels.

Between 1950 and 1965, 23 plague cases occurred in the United States, eight of them fatal. All were in the western states except one in Massachusetts which was carried there by a scientist who contracted the infection in Mexico.

Although there has always been plague in parts of Vietnam, the Public Health Service says no cases have been transmitted here at ports of entry.

A preliminary report of the Denver case is detailed in the Communicable Disease Center's *MORBIDITY AND MORTALITY REPORT* for the week ending July 6.

## ALCOHOL POISONING

### Eight deaths from shellac thinner

A change in a brand of shellac thinner used to make an alcoholic beverage was the cause of eight deaths in Lexington, Ky., because the solvent had a high methanol content. Usually it has high ethanol.

The July issue of the *ARCHIVES OF ENVIRONMENTAL HEALTH*, however, reports that 10 of 18 persons who had been poisoned had their lives saved by peritoneal dialysis (through the abdominal cavity) at the University of Kentucky Medical Center.

Methyl alcohol poisoning has been recognized since before the turn of the century, but only recently has there been, a way to treat it efficiently. Hemodialysis (blood purification) had previously been used, but kidney patients awaiting transplanation had the hemodialysis facilities of the university hospital tied up.

Although peritoneal dialysis is not as rapid as hemodialysis in removing methanol, it is much more available to the practicing physician in almost any medical institution.

A number of the poisoned patients had not yet begun to feel the effects of the methanol, and the physicians who report the cases point out that the "clinically asymptomatic case will readily respond to peritoneal dialysis." In this way they could discover and treat them before the effects of the poison, including blindness, coma and death, became evident.

Dr. Robert L. Kane heads the team that reports the cases.

## TRANSPLANT LEGALITY

### Australian laws adjusted

The Government of Victoria in Australia has told doctors they can go ahead with heart and other major transplant operations, but the Medical Act will be amended during the September session of the Victorian Parliament to clarify procedures for doctors and hospitals to obtain organs for transplants.

This legislation will insure safeguards for donors and patients, and will be similar to laws now enforced in other states of the country.