

MEDICINE

Brain Sickness Cured

Typhoid vaccine treatment cures victims of encephalitis, and also restores to normal those who show serious mental and emotional changes from sleeping sickness.

► **VICTIMS OF** a brain inflammation, known medically as encephalitis, who sometimes sleep in a deep coma for weeks and months can be cured by treatment with typhoid vaccine, it appears from a report to the American Medical Association.

The same treatment can restore to normal those encephalitis victims who show serious mental and emotional changes even when not lost to consciousness in the so-called sleeping sickness.

Typhoid vaccine may also prove the means of preventing incorrigible children and adult misfits, since such behavior abnormalities may be a result of unrecognized encephalitis following measles, mumps or other infectious diseases.

The treatment and its results were reported by Dr. Evelynne G. Knouf of South Pasadena and Dr. Albert G. Bower of Pasadena, Calif. Describing 50 encephalitis patients whose illness came as a complication of measles, they said:

"The 50 patients were involved to such a degree that mentally, emotionally and physically it was doubtful whether or not they would ever return to their former normal state. At least 50% of this number could be considered to be in the 'vegetative state.' In these it was but a matter of time when they would die or would be admitted to one of our mental institutions.

"The 50 patients with encephalitis who were treated were given a series of typhoid vaccine injections by vein or muscle over a period varying from two weeks to three or four months. There were no deaths, and in all those where treatment was carried out as recommended, there was a return to the clinical normal.

"So spectacular has been the return to normal in the severe or 'vegetative' cases that we must revise our thinking about the brain being permanently destroyed. No patient with encephalitis is considered hopeless, regardless of involvement, until typhoid vaccine has been given a fair trial."

The doctors cited the case history of a 17-year-old boy who developed encephalitis following measles. At the time treatment with typhoid vaccine was begun, the youth was in a coma and paralyzed; death was believed imminent. After several doses of the vaccine, the patient began to move his extremities; later he began to talk. His recovery was gradual under treatment, and at the end of two months he was considered to be mentally and emotionally normal; a slight weakness in one foot was lost in a few weeks. Three months after his discharge from the hospital, the youth entered school, and shortly thereafter was classified

IA by the army. A year after his admittance to the hospital his physical condition was excellent and he was making good grades in school.

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BIOCHEMISTRY

Chemicals in Cancers Not in Normal Tissues

► **VARIOUS TYPES** of cancer may contain chemicals not contained by normal tissues. This finding by Drs. Christopher Carruthers and Valentina Suntzeff of Washington University, St. Louis, Mo., was announced by the American Cancer Society which supports their studies.

Compounds were extracted from animal tissues in the normal state, as the tissues are becoming cancerous and when cancer has fully developed. One of the substances is a pyridine-like compound which is present in the normal skin of animals and man but which disappears just at the time when the skin becomes cancerous.

One of the B vitamins, nicotinamide, was found in five different tumors and in brain and spleen but not in six other normal tissues examined.

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• RADIO

Saturday, June 27, 1953, 3:15-3:30 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Charles Schlaifer, co-chairman of the National Mental Health Committee, will discuss "The Battle Against Mental Illness."

ENTOMOLOGY

Suspensions Kill Insects Better

► **FROM THE** long-range point of view, insecticides in the form of suspensions are superior to those that are emulsions, state Dr. Walter Ebeling and Roy J. Pence of the department of entomology at the University of California at Los Angeles.

In suspension, the insecticide particles are suspended in water. In an emulsion, they are dissolved in a solution which is emulsified in water.

Data obtained to date indicate that while emulsions are usually initially more effective, the suspensions are generally superior with regard to their long-term residual effectiveness.

In experiments with certain mites that prey on plants, it was found that with either suspensions or emulsions, particularly the latter, sufficient toxicant penetrates beneath the leaf or fruit cuticle to kill mites that ingest the material.

The effect of the insecticide residues that have penetrated beneath the plant cuticle, as stomach poisons, may be as great as that of surface residue, which poison by contact with the insect.

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THREE AT A TIME—Multiple refueling of three Meteor jet fighters at the same time has been accomplished by a U. S. Air Force B-29, using the probe and drogue system manufactured by Flight Refuelling Ltd., Dorset, England.