

MS May Lurk for Years

► SOME 800 SOLDIERS who were discharged during World War II because of previously undetected symptoms of multiple sclerosis are now believed to have been marked as victims since childhood by "slow" viruses that lurked in their bodies for years without a visible trace.

Dr. John F. Kurtzke of the Veterans Administration Hospital told SCIENCE SERVICE that he would "guess" that all of the hundreds of veterans with MS he had studied (in comparison with a like number who showed no symptoms) had been discharged because the crippling effects had been found after induction.

Dr. Kurtzke's surprise finding, however, was that men and women with higher education and earning power are most susceptible to the disease. Also, he reported at the annual convention of the National Multiple Sclerosis Society in Washington, D.C., that victims from cities outnumber those from rural areas.

"Slow" viruses are believed to live for long periods of time without apparent symptoms in the bodies of humans as well as in animals until something triggers them, Dr. Jacob Brody of the National Institute of Neurological Diseases and Blindness (NINDB) told the meeting.

Included among the slow viruses is the virus causing kuru, a disease occurring in tribesmen of eastern New Guinea.

The most exciting clue that may help unravel the mystery of multiple sclerosis, according to Dr. Brody, may be found in the related kuru disease.

"Kuru is the first human candidate for a 'slow' virus causing a human neurological disease," he said. "Kuru is strikingly like MS in its total effect, although there are significant differences in the two diseases."

Researchers at NINDB have taken tissue from kuru victims and injected it into the brains of chimpanzees and other animals. After a year and a half, four of the animals developed syndromes almost identical with the human kuru disease. Further experiments may provide the first solid proof that a chronic neurological disease of man is due to a "slow" virus.

Another MS investigator, Dr. Murray B. Bornstein, associate professor of neurology at Yeshiva University's Albert Einstein College of Medicine in New

York City, said that he is continuing to fractionate serum taken from MS patients to see if it definitely demonstrates antibodies in tissue culture.

Dr. Bornstein's previous work showed the regeneration of myelin, the fatty sheath that covers nerve fibers, which is destroyed in multiple sclerosis. It had previously been thought that myelin could not be reformed.

"Since we began our work with tissue culture," Dr. Bornstein said, "other investigators have shown at autopsy that myelin is regenerated in humans."

Dr. Leonard T. Kurland of the Mayo Clinic, Rochester, Minn., told the convention that his 17 years of research have shown that environmental factors play a prime role in the development of the disease.

"The prevalence of MS is high in the temperate zones of both the northern and southern hemispheres," he said, "but decreasing rates are clearly apparent in the tropics and subtropics. This difference seems to be associated with geography rather than with race or national origin."

He said climate could influence the occurrence of MS either directly or through some indirect effect on the animal or the plant life in the environment.

An International Federation of Multiple Sclerosis Societies was formed at the meeting to "coordinate and accelerate medical research seeking the cause and cure of MS and related neurological disorders."

MEDICINE

Newest Cancer Facts And Figures Reported

► LATEST STATISTICS compiled by the American Cancer Society reveal that death rates from cancer of the stomach and the uterus are dropping, but that lung cancer is killing more people than ever.

At the present rate, cancer will eventually strike two out of three families and one out of four persons, killing someone every two minutes.

But much can be done to prevent the heavy toll taken by cancer, and the greatest protection — besides eliminating suspected causes, such as smoking — is still the annual checkup. Through regular examinations, about one-half of all persons stricken with cancer could be saved, the Society estimates. At present, one in three is cured.

"There are now 1.4 million Americans, alive today, who have been cured of cancer," according to the Society's publication, "1967 Cancer Facts and Figures." An additional 193,000 Americans will be saved in 1967.

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