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## MEDICINE

### Thymus Abnormalities Linked to Muscle Disease

➤ ABNORMALITIES of the thymus gland have been detected in more than three-fourths of the victims of myasthenia gravis, a nerve and muscle disease afflicting 50,000 in the United States.

The disease is a chronic progressive muscular weakness which usually begins in the face and throat.

At least one in five myasthenia gravis victims has a tumor, known as a thymoma, of the thymus, a team of Boston scientists reported at a meeting of the Federation of American Societies for Experimental Biology.

The thymus, which sits astride the breastplate, is believed to be responsible for immunological processes that give resistance to infections and disease.

The finding of abnormal antibodies believed due in part to abnormalities of the thymus indicates that myasthenia gravis could be an autoimmune disease, a kind of allergy to one's own antigens.

A comparison of 47 myasthenia gravis patients, some of whom had had their thymus removed, with 21 healthy adults, led to the linkage of the disease with autoimmunity.

Several other papers on myasthenia gravis supported the findings of Drs. M. M. Adner, J. D. Sherman, C. Ise, R. Schwab and W. Dameshek.

Myasthenia gravis occurs in both sexes and in all age groups, but it most frequently strikes females in the first three decades of life.

The disease can threaten life if the muscles of respiration are involved, but many patients live comfortably with medical attention.

• Science News Letter, 85:260 April 25, 1964

### Measles Virus Slowed

➤ HOPES HAVE BEEN raised that a new drug may prove able to control German measles.

Investigators from the University of Michigan School of Public Health, Ann Arbor, reported they have collected test tube results which show that the drug l-adamantanamine hydrochloride inhibits the rubella virus of German measles.

Public Health researchers Drs. Kenneth W. Cochran and Hunein F. Maassab of the University's epidemiology department, stressed that their studies had been carried out only in the laboratory, using tissue culture techniques.

No effort has been made to apply the findings to humans.

Dr. Cochran addressed scientists at the Chicago meeting of the Federation of American Societies for Experimental Biology.

He said the drug accounted for more than a 90% inhibition of the German measles virus in the tissue culture samples.

"Further investigation of this effect," he said "depends on finding a laboratory animal susceptible to German measles."

• Science News Letter, 85:260 April 25, 1964

## Questions

ASTRONOMY—What evidence indicates that life on Venus is a possibility? p. 261.

BIOCHEMISTRY—What substance is used to help predict success or failure of organ transplants? p. 259.

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EDUCATION—To what state of the brain is sleep largely limited? p. 264.

ZOOLOGY—Why do zoos find it difficult to exhibit small mammals? p. 270.

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