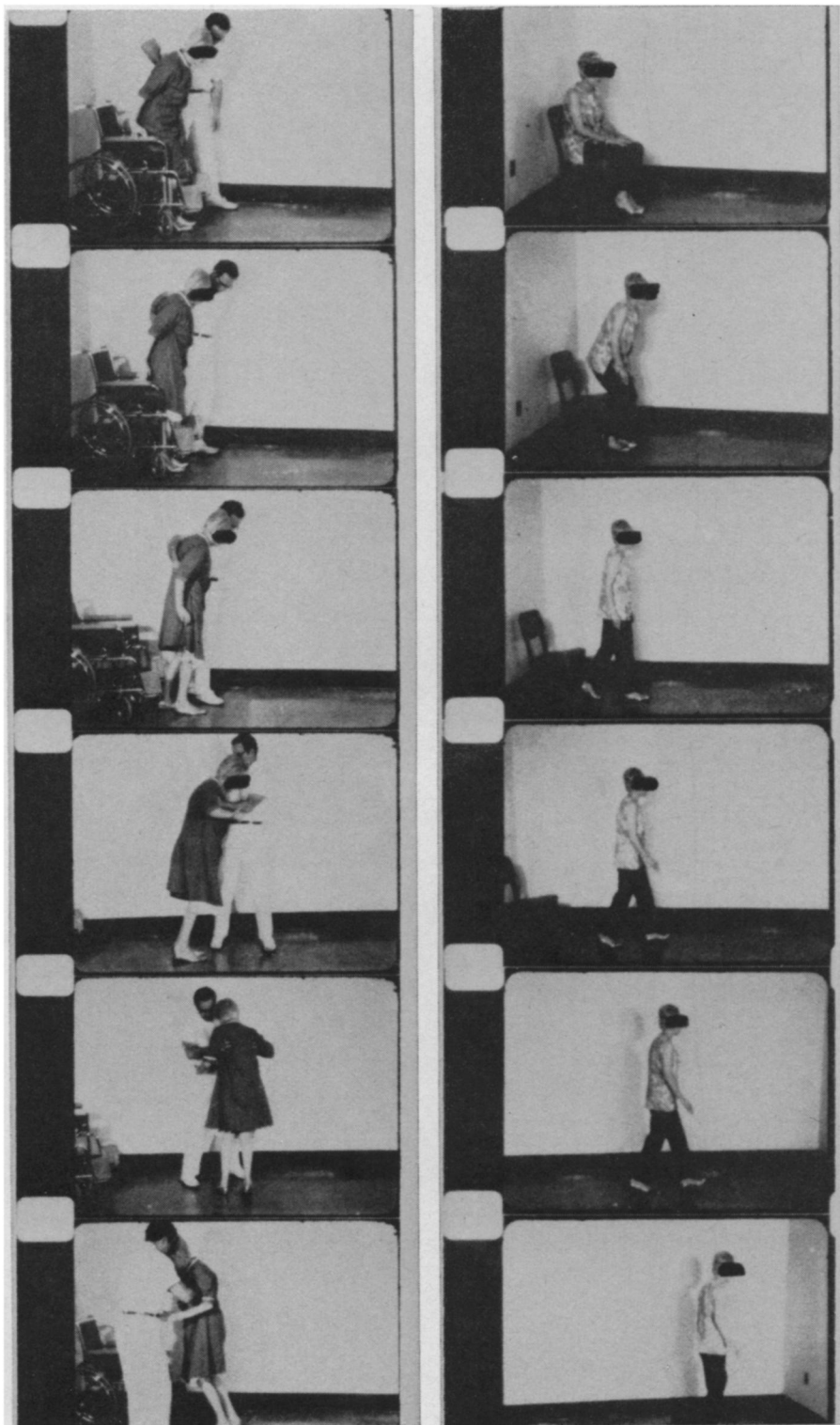


# Probing L-dopa

Mysterious drug helps victims of shaking palsy

by Faye Marley



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*Parkinsonism patient before and after administration of L-dopa.*

In a confidential application for funds to the National Institutes of Health, a group of doctors proposes a study by 20 different institutions across the country of the mysterious drug L-dopa, which is apparently effective against Parkinson's disease. The money is almost certain to be granted.

Some 600 victims of the disease would be treated in the centers. In addition, the drug will be tested against other ailments, and related drugs will be tried.

About one million persons in the United States suffer from parkinsonism, with 50,000 new cases diagnosed each year. No one knows the cause. No one knows exactly why the drug L-dopa (short for Levodihydroxyphenylalanine) works against it.

But the chairman of the group that has applied for the Federal funds, Dr. Marvin D. Yahr, has found it has helped three-quarters of the 100 palsy victims he has treated. Dr. Yahr is a professor of neurology at the Columbia University College of Physicians and Surgeons.

Dr. Yahr says the problem with L-dopa so far is that it brings on side effects, including high blood pressure and a lack of appetite that upsets the metabolic system. Nausea, agitation, loss of strength and delirium are seen in some patients. One of the jobs of the 20 centers will be to work out dosage amounts and schedules for individual patients, while keeping track of blood pressure and other reactions.

The disease is named for James Parkinson, an English surgeon who died in 1824. The obvious symptoms include tremor and muscular rigidity and the loss of reflexes. "The disease affects both sexes and all races. There is no evidence to indicate a hereditary factor, although some authorities claim that there is a familial occurrence," says Dr. Yahr.

The apparent cause is a lack of the body chemical dopamine. But administration of plain dopamine is not effective. For some reason it does not cross the walls of the blood vessels to enter the cells of the brain.

But the variant, L-dopamine, somehow can penetrate, and then is broken down in the brain cells to yield the lacking substance.

Other members of Dr. Yahr's committee are: Drs. George C. Cotzias of the Brookhaven National Laboratory's Medical Research Center at Upton, N.Y., Benjamin Boshes of Northwestern University's Medical Center in Chicago, Charles Markham of the University of California in Los Angeles, Fletcher McDowell of Cornell School of Medicine in New York City, and Richard Remington of the University of Michigan in Ann Arbor. ◊

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