MEDICINE

# Beriberi, Masked as Heart Disorder, Occurs in U.S.

## Better Outlook for Bacterial Endocarditis Seen; Nervous Predisposition to Hypertension Inherited

**B**ERIBERI, serious dietary disease of the Orient, occurs also in the United States, Dr. Soma Weiss of Boston City Hospital declared at the meeting of the American College of Physicians in St. Louis.

Beriberi comes from living on a diet that lacks vitamin B. Medical scientists have always thought that it was limited to Oriental countries and that its chief effect was on the nerves, as shown by the development of polyneuritis and mental disorder.

Occurrence of beriberi in the United States has escaped recognition, it appears from Dr. Weiss' report, because the disease has masqueraded as or been mistaken for disorder of the heart and blood circulation. The disease, contrary to general opinion, is actually relatively common in the United States, Dr. Weiss and his associate, Dr. Robert W. Wilkins, conclude.

Alcohol plays a part in causing the condition, but is secondary to lack of vitamin B in the diet.

Careful study of 120 patients suffering from symptoms of heart and blood vessel disease showed the cause of their ailment to be faulty nutrition, or as the scientists say, nutritional deficiency. The condition is not one of simple starvation, but is induced by the following factors: Low intake or utilization of vitamin B<sub>1</sub>; high metabolism of the body such as occurs through increased caloric intake, through fever, muscular work, pregnacy or hyperthyroidism; a diet rich in carbohydrates or in alcohol. In the northeastern part of the country the disease occurs principally among alcoholics, diabetics, food cranks and pregnant women. In its pure form it develops in persons without organic heart disease. In patients with organic heart disease and with the types of nutritional deficiency described failure of the heart is often precipitated or aggravated. The onset may be gradual or sudden, leading rapidly to severe disintegration of the circulation, which, if untreated, may end fatally.

The usual clinical features include

rapid heart rate, palpitation, heaving cardiac impulse, enlarged heart, shortness of breath, attacks of asthma, engorgement of the veins and transient heart murmurs.

Rapid and dramatic recovery with disappearance of all the abnormal changes in the heart and blood vessels follows treatment by rest and diet rich in vitamin B or doses of the crystalline vitamin B<sub>1</sub>. If the condition has gone so far, however, that the structure of the heart and blood vessels has been altered, improvement is slow and incomplete.

#### Acidosis Remedy

Lactic acid, best known from its occurrence in sour milk and sauerkraut, has proved a "very safe and effective" remedy for severe acidosis, Dr. Alexis E. Hartmann, of Washington University School of Medicine, reported.

Mixtures of lactic acid and the related sodium lactate have proved valuable in controlling acidity of the stomach and are of particular value in treating urinary infections in infants and young children.

Dr. Hartmann was discussing a kind of acidosis that is much more severe than the condition that drives the layman to the family medicine chest for a dose of sodium bicarbonate.

### Better Outlook

The outlook for the severe heart dissease called bacterial endocarditis may not be so grave as generally supposed, it appears from studies reported by Dr. Louis Hamman of Johns Hopkins University School of Medicine.

Ordinarily this condition, which is an inflammation of the heart lining following a germ infection, is considered hopeless, Dr. Hamman pointed out. When the condition is well developed very, very few patients recover.

More patients actually do recover than would be suspected from the records in doctors' offices, Dr. Hamman found from careful study of anatomical specimens. Not infrequently cases of this disease are discovered at post mortem

examination which had not been recognized during the patient's life. In some of the examinations Dr. Hamman found that the bacterial infection had been well on the way to healing before the patient died. In other cases healing had actually taken place. The condition had probably not been recognized during the patient's life because the symptoms were so slight as to escape notice.

#### **Blood Pressure Inherited**

High blood pressure, or more accurately a nerve set-up conducive to it, is very probably inherited, Dr. Edgar A. Hines, Jr., of the Mayo Clinic told the members of the American College of Physicians.

An ice water test which indicates that a person is likely to develop high blood pressure gave strong evidence that an hereditary factor plays an important role in the development of high blood pressure, Dr. Hines reported. The high blood pressure he studied is known to doctors as essential hypertension and is the kind that is not preceded by kidney disease.

The ice water test, called the "cold pressor test," consists in measuring the rise in blood pressure produced by the stimulus of placing one hand in ice water. It was devised by Dr. Hines and the late Dr. George E. Brown. It divides people into two groups; those having normal or minimal reactions (slight rises in blood pressure), and those having abnormal or excessive reactions. Almost all persons with high blood pressure belong in the latter group of excessive reactors.

One other group of persons who do not have high blood pressure give excessive reactions to the test, and these are the ones likely to develop high blood pressure in the future. A few of them have already done so since the ice water test was first used five years ago.

In the study of inheritance of high blood pressure, Dr. Hines gave the ice water test to 600 persons with normal pressure, 10 sets of twins and 250 members of 30 family groups consisting of from two to four generations. Comparing the results with family histories, Dr. Hines found a family history of high blood pressure five times as frequently among persons who reacted abnormally to the ice water test as among normal reactors.

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When moving picture actors have irregular teeth, a perfect line is artificially produced by porcelain facings or jackets.