MEDICINE

One Out of Three Saved

➤ ONE person in three who would be expected to die from a specific heart attack can be saved by intelligent use of two new drugs, Dr. Irving S. Wright of New York declared at the meeting of the Illinois State Medical Society in Chicago.

The one out of three to be saved would be a victim of a blocking of the artery supplying the heart muscle with blood. Coronary occlusion is the medical name for the condition. When the blocking is caused by a blood clot, doctors call it coronary thrombosis.

The drugs that would save him are anti-clotting chemicals. They are called heparin and dicumarol. Heparin is extracted from the liver. Dicumarol is found in spoiled sweet clover but is also made synthetically.

These drugs were used in a study of 1,000 patients at 17 hospitals throughout the United States. The study was set up in 1946 under the auspices of the American Heart Association and financed by the U. S. Public Health Service.

"During the past 20 months patients admitted to the participating cardiac (heart) services on even days of the months have received conventional treatment while those admitted on odd days of the months have received conventional plus anticoagulant (anti-clotting) treatment," Dr. Wright explained.

The results to date show that the number of deaths from coronary thrombosis can be reduced from approximately 23% to 13%, or between one-third and

one-half. The number of thromboembolic complications can be reduced from approximately 19% to 9%, or onehalf, by the proper use of anticoagulant treatment, Dr. Wright reported.

Patients with rheumatic heart disease who suffer multiple attacks of blood vessel blocking by blood clots are likely also to be helped by the anti-clotting drugs. Twenty-two such patients have been given the new treatment since 1946.

Some who have had as many as 12 and even 20 blood clots have stopped having them, Dr. Wright reported. In the six treated more than one year, one for as long as 19 months, no blood clots have developed.

The new method has some disadvantages, Dr. Wright pointed out. It is difficult to keep patients faithful to the treatment regime over long periods when they are not in the hospital. And the drugs themselves are not ideal. Most of the so-called failures with them, however, come from failure to give enough of the drugs, he said.

The possibility of using these or a still-to-be-discovered ideal anti-clotting drug as a preventive of some forms of heart trouble was discussed by Dr. Wright.

"The fact that an extremely high percentage of persons in the older age group die or are crippled by thrombotic episodes raises interesting questions regarding the widespread prophylactic use of such a drug, first suggested by E. V. Allen," he concluded.

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MEDICINE

Give Pint of Blood Yearly

➤ EVEN in peacetime America must give 3,700,000 pints of blood each year, Admiral Ross T. McIntire, administrator of the American Red Cross National Blood Program, told members of the pharmaceutical profession meeting in Washington.

An offer to help achieve this goal was made by the American Pharmaceutical Association during ceremonies dedicating a war memorial to pharmacists.

The 3,700,000 pint figure is the blood physicians and surgeons estimate the nation needs each year to save the lives of accident victims, mothers in childbirth, sufferers from hemorrhage due to other causes and sick people who can be

helped to recovery through use of various components of blood. More than 50 such components have been discovered and many of them are medically useful, Admiral McIntire said.

To meet the blood needs, at least one out of every 20 persons between the ages of 21 and 59 must give a pint a year. The first six of an eventual nation-wide network of Red Cross blood centers for collecting and distributing blood have already been established. The blood collected through this program and its products will be supplied without charge where needed.

"Preparedness," or "civilian defense planning" may constitute a "moral equivalent of war," Dr. Leonard A. Scheele, Surgeon General of the U. S. Public Health Service, declared at the health conference on national security held in conjunction with the war memorial dedication.

What such planning or preparedness amounts to, he said, is "building a strong peacetime public health program through the cooperation and team work of all groups concerned with health.

"It is our best guarantee of national happiness and prosperity."

Science News Letter, May 15, 1948

GENERAL SCIENCE

Memorial Fund Established For Students of Science

➤ A MEMORIAL fund, the income of which will be used to "reward and help young students of science," is being established at Princeton University in memory of the late Shuichi Kusaka, internationally known Japanese-born physicist and a member of the Princeton Faculty, who was drowned last August at Beach Haven, N. J., it was announced by Dr. Harold Willis Dodds, president of Princeton.

Several distinguished scientists including Dr. Albert Einstein, Dr. J. Robert Oppenheimer, director of the Institute for Advanced Study, and Prof. Henry D. Smyth, chairman of Princeton's Department of Physics, are among the members of the committee sponsoring the project that has already gained the support of Japanese-Canadians in Vancouver, British Columbia, where Dr. Kusaka made his home before World War II.

Born in Osaka, Japan, Dr. Kusaka moved to British Columbia when he was five years old and was graduated from the University of British Columbia in 1937 with highest honors in mathematics and physics. He took his Master in Science at the Massachusetts Institute of Technology in 1938 and in 1942 was granted his doctorate in theoretical physics by the University of California.

He became a member of the Institute for Advanced Study in 1942. A year later he joined the Smith College faculty and, following two years of enlisted service with the Army of the United States at the Research Laboratory at the Aberdeen Proving Ground, Md., became a member of Princeton's Department of Physics. Shortly before his death last summer he was promoted to an assistant professorship at age 31.

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