

We're Beating Heart Disease!

*Improvements in
diagnosis, surgery,
and therapy are saving
thousands from the
nation's No. 1
killer.*



This is catheterization, new aid in studying congenital heart disease. Tube is passed through child's veins from arm to heart.

by Howard Earle

"HAROLD just had a heart attack! The doctor thought we should let you know, just in case." My sister's voice trembled over the phone as she told me about our brother's attack.

Thousands of Americans receive similar jolting messages every day, for heart disease is the nation's No. 1 killer. It kills more than 800,000 Americans each year. A recent survey showed that 15 out of every 1,000 persons suffer heart disease annually.

Yet there is a bright side to this otherwise gloomy picture. Some heart attacks are mild and the heart can repair itself. And now even serious cases can hope for a return to normal life, thanks to the remarkable advances made in recent years.

Take my brother Harold's case. My first concern was what caused the attack and how much damage was done to the heart. Recent diagnostic innovations made possible quick recognition of coronary thrombosis—blood clotting and clogging an artery supplying the heart muscle.

The electrocardiograph remains valuable in determining whether a heart attack has occurred. But new techniques, combined with the electrocardiograph, have considerably improved diagnosis of attacks.

Medical researchers at Duke University, Sloane-Kettering Institute, and other medical centers have developed a method which often detects the presence and severity of diseases in the heart and liver by measuring the enzyme levels in the blood serum.

Theoretically, every organ in the human body has special enzymes, and if cells in an organ die due to disease, enzymes are released into the blood stream. By following these enzyme levels, the type of disease and its severity often are determined.

ANOTHER advance—the phonocardiograph—is used to make a record of the heart's sounds on photographic films. In some instances, the phonocardiograph eliminates elaborate tests formerly used to diagnose diseased heart valves. Working with the electrocardiograph, an instrument that records the heart's electrical impulses, the phonocardiograph is of particular value in detecting types of heart disease curable by surgery.

"The outlook for correcting coronary defects by surgery is brighter than ever before," says Dr. Michael E. DeBakey, professor of surgery at Baylor University. "Within the next five or ten years, we shall be able to attack successfully conditions for which we have no satisfactory solution today."

Successful heart operations in the experimental field are substantiating Dr. DeBakey's optimism.

In Montreal, for example, a housewife walked into a doctor's office with severe chest cramps caused by angina pectoris, a painful and often fatal coronary artery disease. Dr. Arthur Vineburg gave the woman sedatives to quiet her and later, in a bold operation, transplanted a chest artery into the diseased heart muscle. The Canadian woman since has returned to her housework and children.

New techniques also permit surgeons to drain the heart and pump blood through artificial channels into a heart-lung machine. The blood picks up oxygen before passing to body tissues, the machine doing the work of the heart and lungs.

With the machine, surgeons can open the heart to see any damage; before, they felt for clots and holes with their fingers. With either natural grafts or plastic tubes, they even cut and replace damaged sections of the main artery where it arches from the heart.

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