



FASTEN SEAT BELT

1st CORONARY UNIT

Tower
Ambulance



[TRIBUNE Staff Photo]

Members of Edgewater hospital staff simulate use of mobile coronary care unit. Bautista Ortiz poses as patient receiving care thru aid of Dr. Mohammed Quadeer and Nurse Donna Dreher.

Mobile Hope For Heart Patients

BY RONALD KOTULAK

Many heart attack victims die before they reach the doors of a hospital, even tho their hearts are healthy enough to live.

The simple reason for these deaths is that the victims can't reach a hospital coronary care unit in time for life-saving treatment. It is estimated that 40 to 75 per cent of all heart attack victims die in the first hour after their attack.

Many of those who die after the first hour, but before they get to the hospital, are victims of cardiac arrest [heart stoppage] or ventricular fibrillation [wild beating of the heart]—conditions that can often be prevented with modern drugs and treatment.

Use Mobile Unit

Over the last 10 months in an effort to save some of the 7 out of 10 heart victims who die before they reach a hospital, Edgewater hospital doctors have been speeding a mobile coronary care unit to victims at home or any other place where they have been stricken.

The results in the 54 cases handled have been encouraging and may mean "we can save the lives of many more heart

patients," said Dr. Irwin R. Callen, director of cardiology and president of the hospital's medical staff.

Dr. Callen said the unit has saved the lives of four patients who otherwise would have died. It probably was responsible for saving eight others who were prevented from going into cardiac arrest or fibrillation thru immediate care.

Four Recovered

Eight patients picked up by the mobile unit were pulled out of cardiac arrest or fibrillation by the crews' quick action. Four of the eight later recovered. The others died, victims of irreversible heart damage.

"The four who survived would have died at home or in the ambulance had they not been given proper care before getting to the hospital," he said.

Dr. Callen said the life-saving success of the hospital's coronary care unit encouraged the staff to develop the mobile unit concept.

Before the hospital developed the coronary care unit, 35 per cent of its heart attack patients died, primarily from cardiac arrest or fibrillation, said Dr.

Callen. Now, the death rate is 14 per cent.

Carries Similar Gear

The mobile unit carries much of the same equipment used in the coronary care unit. The equipment includes an electrocardiogram for monitoring the heart beat, drugs to calm an excited heart, drugs to stimulate a stopped heart, and an electrical device that shocks the heart back to a normal beating.

When the hospital gets a coronary call, the special equipment, which costs about \$4,000, is loaded in an ambulance or, if an ambulance is not available, into a car.

A doctor goes along to handle the case. He is accompanied by a nurse trained to care for heart patients, Dr. Callen said.

17 Per Cent

Officials at the hospital decided the unit was a necessity because so many patients die in ambulances or arrive at the hospital with permanent brain damage. Dr. Callen said studies have found 17 per cent of all heart attack victims die in an ambulance.

When a mobile unit reaches a victim, the electrocardiogram is used to measure the activity of his heart. If medication is

needed, the doctor injects it into a blood vessel, while the nurse takes the blood pressure. If the victim's heart has stopped, the doctor, or nurse, may strike his chest a sharp blow to jar the heart into beating again.

If that doesn't work, a drug that acts like adrenalin is injected thru the already connected intravenous needle to stimulate the heart.

May Use Massage

In the event the heart still does not start, a member of the mobile team will administer closed chest massage to keep blood flowing to the brain. At the hospital, a pacemaker device can be used to run the heart.

If a victim's heart starts beating wildly, a type of anesthetic is used to calm it. During a period of wild beating, the heart is unable to pump blood.

If the beating becomes acute, an instrument, called a defibrillator, is pressed against the chest and an electric charge is used to shock the heart into beating normally.

Dr. Callen said the mobile unit is "a relatively inexpensive idea other hospitals can adopt to save more lives of heart attack victims."



go Medical



Hospital heart-care team is given wheels

By Arthur J. Snider
Daily News Science Editor

Edgewater Hospital will put its coronary-care unit on wheels and take rescue measures to the heart patient, at home, on the street, or wherever he may be.

Dr. Irwin R. Callen, cardiology director, said Wednesday the minutes saved will in many cases mean the dif-

ference between life and death.

FIRST HOSPITAL in the city to inaugurate the mobile service, Edgewater's plan can easily be adopted by others with a minimum investment, Dr. Callen said.

No purchase of an ambulance is necessary. The medical team loads its equipment on a private ambulance which stops at the hospital for the pickup. In Edgewater's

case, the ambulance company is located across the street.

From the patient's end the system works this way:

He or a member of the family notifies the family physician of the chest pains or other symptoms. The doctor calls the hospital which in turn alerts the coronary care unit and the ambulance.

DR. CALLEN believes the emergency team consisting of a heart physician, a nurse and a member of the house staff can be on its way within two minutes.

If an ambulance is not immediately available, a private car can be used as the portable equipment is not heavy.

THE CARDIOLOGIST

believes the system will work best if the calls are limited to the area now served by the hospital from its location at 5700 N. Ashland. For the present, preference will be given to calls from physicians on the hospital staff.

Dr. Callen could not estimate the number of lives that might be saved through mobile care. He noted, however, that one of

the major complications among heart patients brought to hospitals is an absence of regular rhythm, known as ventricular fibrillation, a leading cause of coronary death.

If treated quickly, ventricular fibrillation can be corrected or even prevented at the scene with a portable defibrillator.

